SEQUENCE LISTING

- <110> KILLARY, ANN LOTT, STEVE CHANDLER, DAWN
- <120> THE TUMOR SUPPRESSOR CAR-1
- <130> UTSC:651US
- <140> UNKNOWN
- <141> 2001-08-09
- <150> 60/227,560
- <151> 2000-08-23
- <150> 60/225,033
- <151> 2000-08-10
- <160> 9
- <170> PatentIn Ver. 2.1
- <210> 1
- <211> 475
- <212> PRT
- <213> Human
- <400> 1
- Met Ala Cys Ser Leu Lys Asp Glu Leu Leu Cys Ser Ile Cys Leu Ser

 1 5 10 15
- Ile Tyr Gln Asp Pro Val Ser Leu Gly Cys Glu His Tyr Phe Cys Arg 20 25 30
- Arg Cys Ile Thr Glu His Trp Val Arg Gln Glu Ala Gln Gly Ala Arg
 35 40 45
- Asp Cys Pro Glu Cys Arg Arg Thr Phe Ala Glu Pro Ala Leu Ala Pro 50 55 60
- Ser Leu Lys Leu Ala Asn Ile Val Glu Arg Tyr Ser Ser Phe Pro Leu 65 70 . 75 80
- Asp Ala Ile Leu Asn Ala Arg Arg Ala Ala Arg Pro Cys Gln Ala His
 85 90 95
- Asp Lys Val Lys Leu Phe Cys Leu Thr Asp Arg Ala Leu Leu Cys Phe

100 105 110 Phe Cys Asp Glu Pro Ala Leu His Glu Gln His Gln Val Thr Gly Ile 115 120 125 Asp Asp Ala Phe Asp Glu Leu Gln Arg Glu Leu Lys Asp Gln Leu Gln 130 135 Ala Leu Gln Asp Ser Glu Arg Glu His Thr Glu Ala Leu Gln Leu Leu 145 150 155 160 Lys Arg Gln Leu Ala Glu Thr Lys Ser Ser Thr Lys Ser Leu Arg Thr 165 170 Thr Ile Gly Glu Ala Phe Glu Arg Leu His Arg Leu Leu Arg Glu Arg 180 185 190 Gln Lys Ala Met Leu Glu Glu Leu Glu Ala Asp Thr Ala Arg Thr Leu 200 195 205 Thr Asp Ile Glu Gln Lys Val Gln Arg Tyr Ser Gln Gln Leu Arg Lys 210 215 220 Val Gln Glu Gly Ala Gln Ile Leu Gln Glu Arg Leu Ala Glu Thr Asp

Val Gin Giu Giy Ala Gin lie Leu Gin Giu Arg Leu Ala Giu Thr Asp
225 230 235 240

Arg His Thr Phe Leu Ala Gly Val Ala Ser Leu Ser Glu Arg Leu Lys 245 250 255

Gly Lys Ile His Glu Thr Asn Leu Thr Tyr Glu Asp Phe Pro Thr Ser 260 265 270

Lys Tyr Thr Gly Pro Leu Gln Tyr Thr Ile Trp Lys Ser Leu Phe Gln 275 280 285

Asp Ile His Pro Val Pro Ala Ala Leu Thr Leu Asp Pro Gly Thr Ala 290 295 300

His Gln Arg Leu Ile Leu Ser Asp Asp Cys Thr Ile Val Ala Tyr Gly 305 310 315 320

Asn Leu His Pro Gln Pro Leu Gln Asp Ser Pro Lys Arg Phe Asp Val 325 330 335

Glu Val Ser Val Leu Gly Ser Glu Ala Phe Ser Ser Gly Val His Tyr 340 345 350

Trp Glu Val Val Val Ala Glu Lys Thr Gln Trp Val Ile Gly Leu Ala

355 360 365

His Glu Ala Ala Ser Arg Lys Gly Ser Ile Gln Ile Gln Pro Ser Arg 370 375 380

Gly Phe Tyr Cys Ile Val Met His Asp Gly Asn Gln Tyr Ser Ala Cys 385 390 395 400

Thr Glu Pro Trp Thr Arg Leu Asn Val Arg Asp Lys Leu Asp Lys Val 405 410 415

Gly Val Phe Leu Asp Tyr Asp Gln Gly Leu Leu Ile Phe Tyr Asn Ala 420 425 430

Asp Asp Met Ser Trp Leu Tyr Thr Phe Arg Glu Lys Phe Pro Gly Lys
435 440 445

Leu Cys Ser Tyr Phe Ser Pro Gly Gln Ser His Ala Asn Gly Lys Asn 450 455 460

Val Gln Pro Leu Arg Ile Asn Thr Val Arg Ile 465 470 475

<210> 2

<211> 304

<212> PRT

<213> Human

<400> 2

Met Ala Cys Ser Leu Lys Asp Glu Leu Leu Cys Ser Ile Cys Leu Ser 1 5 10 15

Ile Tyr Gln Asp Pro Val Ser Leu Gly Cys Glu His Tyr Phe Cys Arg
20 25 30

Arg Cys Ile Thr Glu His Trp Val Arg Gln Glu Ala Gln Gly Ala Arg
35 40 45

Asp Cys Pro Glu Cys Arg Arg Thr Phe Ala Glu Pro Ala Leu Ala Pro 50 55 60

Ser Leu Lys Leu Ala Asn Ile Val Glu Arg Tyr Ser Ser Phe Pro Leu 65 70 75 80

Asp Ala Ile Leu Asn Ala Arg Arg Ala Ala Arg Pro Cys Gln Ala His 85 90 95 Asp Lys Val Lys Leu Phe Cys Leu Thr Asp Arg Ala Leu Leu Cys Phe 100 105 110

Phe Cys Asp Glu Pro Ala Leu His Glu Gln His Gln Val Thr Gly Ile 115 120 125

Asp Asp Ala Phe Asp Glu Leu Gln Arg Glu Leu Lys Asp Gln Leu Gln 130 135 140

Lys Arg Gln Leu Ala Glu Thr Lys Ser Ser Thr Lys Ser Leu Arg Thr 165 170 175

Thr Ile Gly Glu Ala Phe Glu Arg Leu His Arg Leu Leu Arg Glu Arg 180 185 190

Gln Lys Ala Met Leu Glu Glu Leu Glu Ala Asp Thr Ala Arg Thr Leu 195 200 205

Thr Asp Ile Glu Gln Lys Val Gln Arg Tyr Ser Gln Gln Leu Arg Lys 210 215 220

Val Gln Glu Gly Ala Gln Ile Leu Gln Glu Arg Leu Ala Glu Thr Asp 225 230 235 240

Arg His Thr Phe Leu Ala Gly Val Ala Ser Leu Ser Glu Arg Ala Ser 245 250 255

Arg Pro Asn Pro Gly Pro Gly His Ser Pro Pro Ala Pro Asp Pro Val 260 265 270

Gly Arg Leu His His Cys Gly Leu Arg Gln Leu Ala Pro Thr Ala Thr 275 280 285

Ala Gly Leu Ala Lys Ala Leu Arg Cys Gly Gly Val Gly Ala Gly Phe 290 295 300

<210> 3

<211> 3826

<212> DNA

<213> Human

<400> 3 aggetgeget ggaeegaage ggtggetget aagetegegg gggtaagggg tegegetggg 60 ccagggtttg gggccgggat ccggcagctg agcgggccgg cacccctcct cttctctgcc 120 ggtcacagee aatgtaegge teggeetgge tgeeecetee eecaggatte eecateeeca 180 gettetegee eteceegeae egeeceeaee eegggattte gaeeeeetta agggeteeae 240 cccgctccgg gatccccttc tcccagctcc tatcccttag gactgccccg ccccctagaa 300 cctccccgtc aggatetecg teectcagee geteacagee teeteecage geecategee 360 ttgagetgee cactacetet agaetgeeet eeegggetgg egteeeaegg agteteagee 420 gegeaeceet teetegegtt acceteette eggacageae eeceteeett eteeggtage 480 tectaceeet geetgtgegg geetegteee egegeeeage eeteggtget geeteegaea 540 gegeegeget eteteageeg ecceetgee eetegggeee ecctetetge tgeecetgge 600 gccatggcgt gcagcctcaa ggacgagctg ctgtgctcca tctgcctgag catctaccag 660 gacceggtga geetgggetg egageactae ttetgeegee getgeateae ggageaetgg 720 gtgcggcagg aggcgcaggg cgcccgcgac tgccccgagt gccggcgcac gttcgccgag 780 cccgcgctgg cgcccagcct caagctggcc aacatcgtgg agcgctacag ctccttcccg 840 ctggacgcca tecteaacge gegeegee gegegaceet gecaggegea egacaaggte 900 aagetettet geeteaegga eegegegett etetgettet tetgegaega geetgeaetg 960 cacgagcagc atcaggtcac cggcatcgac gacgccttcg acgagctgca gagggagctg 1020 aaggaccaac ttcaggccct tcaagacagc gagcgggaac acaccgaagc gctgcagctg 1080 ctcaagcgac aactggcgga gaccaagtct tccaccaaga gcctgcggac cactatcggc 1140 gaggeetteg ageggetgea eeggetgetg egtgaaegee agaaggeeat getagaggag 1200 ctggaggcgg acacggcccg cacgctgacc gacatcgagc agaaagtcca gcgctacagc 1260 cagcagctgc gcaaggtcca ggagggagcc cagatcctgc aggagcggct ggctgaaacc 1320 gaccggcaca ccttcctggc tggggtggcc tcactgtccg agcggctcaa gggaaaaatc 1380 catgagacca acctcacata tgaagacttc ccgacctcca agtacacagg ccccctgcag 1440 tacaccatet ggaagteeet gtteeaggae atecaceeag tgeeageege cetaaceetg 1500 gacccgggca cagcccacca gcgcctgatc ctgtcggacg actgcaccat tgtggcttac 1560 ggcaacttgc acccacagcc actgcaggac tcgccaaagc gcttcgatgt ggaggtgtcg 1620 gtgctgggtt ctgaagcctt cagtagtggc gtccactact gggaggtggt ggtggcggag 1680 aagacccagt gggtgatcgg gctggcacac gaagccgcaa gccgcaaggg cagcatccag 1740 atccagccca gccgcggctt ctactgcatc gtgatgcacg atggcaacca gtacagcgcc 1800 tgcacggagc cctggacgcg gcttaacgtc cgggacaagc ttgacaaggt gggtgtcttc 1860 ctggactatg accaaggett geteatette tacaatgetg atgacatgte etggetetae 1920 acetteegeg agaagtteee tggeaagete tgetettaet teageeetgg ceagageeae 1980 gccaatggca agaacgttca gccgctgcgg atcaacaccg tccgcatcta gtccaggcag 2040 aaggagacca caacctcctg ggaccactgc cacctgcaag agccctgccc aggaagatag 2100 aagacctgga ctccagccca ccgtggccac tggagacctc aggccagttg tttaccctcc 2160 ageeteeagt etgtaaaatg gaggttgeat teeetaette etaaaetete tteeageate 2220 gatgttctgt agctctgacc ttgataggga tacagctttg atccaaggat gtgacatggc 2280 tteteeteag ggeaaceeet geecaaceet cateeceate tteteagggg caggggacta 2340 cettecagtg teteceteca geceageest gaseteagga agtgteagag catggecagt 2400 agttggcagc ccgaaagaca cacagcaccc tcttatgtcc catggcctaa gacttacccc 2460 tgaccaaget agtgatggge catttaceet tgaccecagt ceacagtggt cacaggtagt 2520 acctggtcct agggttgcct gagagccaac ctctcctgcc acccccacac caagaactat 2580 atggttccta cttctcccac tgatctgctg gtcagtgatg atgctgtggc ctgtggaagg 2640 cacctggtag ttgagtccac acattatagt catgtgccac caccttcctg cccacaggcc 2700 gagggacagg gtgagggtat acccaaagct gatgcagagc ccattagcct aaaagcaact 2760 gcaggacaag cctccctgga tgatcgaggt ccccagtagc tctgaacaag agtccagcca 2820

accetettea gecaggeete tgtgaeetge tagggtgeag gaggetteea gaageagttg 2880 ttgtaattag gacccaagca ctgggagggg ctgttggcta gaccccttgt cagacttggc 2940 atctatctca gttaggatcc tgctgcagaa aacaagagcc acttgtagct ggtttaatta 3000 gacaaggatt tactacctgg cccctggtgg cttgcaaaat tgttggaaga gctggagaag 3060 cagactetge tgaattteca ggaacteeca gegecagatt cateatgtet gttgtgaeca 3120 ggaaagctgc ccccatctgc aggaagccac tatgccagaa agctgctgac tgcagaacta 3180 ggctccctct gccacggtcc gtgccagcca atagatgtcc tgaggcctgc ccctctccca 3240 cttcactcag ttcccaaatc taaattttta caagagattc tgtttggggg aacttaagtc 3300 agatccagaa ccttggctgc aagggagtct gggaaatgtc atttccctag aaggaagtta 3360 gggtgggtgg agcaagcccc acctgcgttt ttctgccaca gcatccaatc gtgaagaact 3420 cgggagaggg tggagtccac atctagggtt gtcctgcccc ttggctctat ccctgcccag 3480 aggtgggaac tggaggagtg ggctgcaaga ctgagcctaa atgtctcccc ggccttgact 3540 tttctttcta gtcctggggc ctagattctg cacttggggt ctctgacaca acacaccatc 3600 ccaaagtagc cggaagagct aaacacaggg ggttcttaaa atggctgccc ccgccacccg 3660 ggcctccctt gggcaaaagg aattgtcagc cctaccccaa cccttcaact accagaatct 3720 gggccacccc agcagtattt ttatttaaaa tgttgcccat tttatgagtt atgatcaatt 3780 3826

<210> 4 <211> 49744 <212> DNA <213> Human

<400> 4

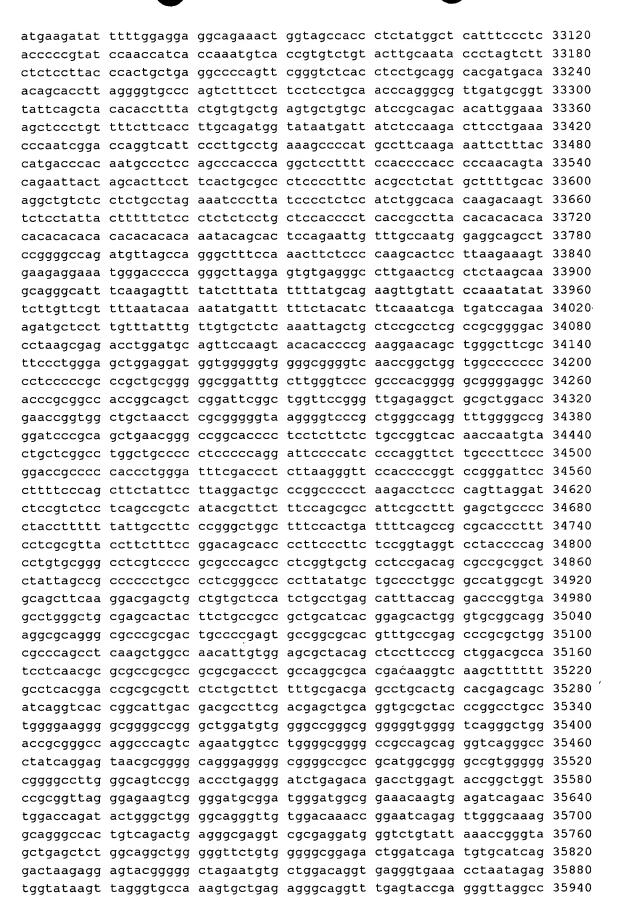
gttgcccagg ctggagtgca gtggtgcaat atcagttcag tgcaacttcc acttcccagg 60 ttcaagggat ttttttggga ggcttcagct tcccaaatac ctggaaaaca ggcgcccgcc 120 accatgcctg gaaagatggg tagagatggg gtttcaccgt gttaaccagg atggtgtgga 180 cctcctgacc tcatgatctg cctacctctg cctcccaaag tgttgggatt ccaggcgtga 240 gccaccgcgc ccagctggtt ttattatttt tttattgttt tatttgaata agtattactg 300 tggcccaagt acatccaaga atgtaatagc ttaatgcttt cactactatt gtgagtgaaa 360 acttttccct gtgtttttga gctgagatgc tggcttgcat tctaaaattc attgatttcc 420 tttagtaacc acacccaccc ccttaagatt ttccaaggtg ggcaaatacg ttatctgcag 480 tgtaatattt tatttettea tettetatgt attatgettt titgtitett titttetgat 540 agctattgct agcatttctc atcatatata aaatgggaat gatgacagaa aggttcagac 600 ttggaatcag aagacatggg tttgagacct ggctctgcca tagaccagct gagtaacctt 660 aggcaaagca aggtaattaa tetetetgag eettatttet etagtttete catttggaaa 720 atgacagggc tgaacttcag tgtatctcaa tgaagtcaga gttggatcat tatttaaaat 780 agtctctctt cattgtgggg ttttgttttg tctgtagttt taataaagaa tagatgctac 840 gggctacttc atggtatgtt gacatgtatt gggaaaatta aacttgaact gtagatctat 900 attttccatg ttatgaagcc agtgattgac ttctctcctg ttgtctgcac ctttcatttt 960 agagataata tgactgtgaa tttggttagc taagatttca tgtcaggttt ttgcctatat 1020 ctgctctgtc acccaggctg gagtgcagtg gtgcgatctc agctcactga aacctccgtc 1200 egggtteaaa tgattegeet gtgteageet eetgagtage tgagattaea ggegeetgee 1260 accatgcctg gctaattttt ttgtattttt agtaaagaca gggctttacc atgttggcca 1320 gactggatga tttttttttc ttttcttttt ttttttttt tgagacaggg tcacacactc 1380 gtcacccagg ctggagtgca gtggcgcaat ctcggctcac cgcaacctcc acctcccggg 1440 ttcaagtgat teteetgeet cageetteeg agtagetggg attacaggea tgtgeeacga 1500 tgcccggcta attttgtatt tttaatagag atggggtttc tccatgttgg tcaggctggt 1560 ctcaaactcc cgacctcagg tgatccaccc gcctcggcct cccaaagtgc tgggattacg 1620 ggcataagcc actgcaccca gccatatata tatatattt tttttgagac agagtcttgc 1680 tetgttgeee agggtggagt geagtggegt gateteagtt eactgeaace tetgeteeea 1740 gttcaagcga ttttcctgcc tcagcctcct gagcagctgg gattacaggt gcctaccacc 1800 atgcccggct aattttttgt ttctttagta gagacagggt tttaccatgt tggccaggct 1860 ggtcttgaac tcctgacctc atgattcacc tgccttggcc tcccaaagtg ctgggactac 1920 aggcatgage caccacacce gactggcaat gcattettta aaaaaaaaaa agactcaaca 1980 gtaacatatg gtcctacttt taaaggcttc agaagtgtat aagatgaaag agaacagtgc 2040 ttcgacccca cctcatcagg ccctttttat agctgagaca gctccttcct gtccagacac 2100 atgtctcgct gtgagacgag atttgcattt acaggaatag ctttctaatc tgcatattgg 2160 tetecatece ttggaaaegt tetecateet eacetetgea ggteeegggt aceatetete 2220 cccatcttct gccactctct aaatggtagc attcttctga attcctaggc ctccctgtct 2280 tgtaaaccct ccttcttctc agaagaaggg ttatctcctc ccatggcttt aaataccatc 2340 aatatgecae tgetteecae attttaatet eeageteaga eetatatate eagttgaeta 2400 agagctacaa acttgcacat ccaactaccc gcttgagatt cctactggga tttcacagac 2460 atctcaagtt taacttgttc agaactgaac tettgatttc caaceeccaa acttetttca 2520 ctaaaatggg agtgccacta gcccgagtgt tgagggtaaa aaagttggga ttattcttga 2580 atttttggtt tccttttcct tccacatgca gttccacctg caaattgttg ggtgtggttc 2640 caaaatacat tttggtttca gtgaattctt cctctgtggc caccctaatg caagccacca 2700 ttgcctcctg cttgagctac tgcagtagcc attaactggt tttccacccc catactacta 2760 cctgcttacc acccattttc cacgctgcag acagaatgat cttttaaaat cccaaagatt 2820 atgecectee tetgettaac accatetgtg getteecatt geteteagaa taaaacctag 2880 actecttace acaacgagea aggeteetge catetteeca ggeacetetg eceteactee 2940 tgtccctgtt ttcagctcca cttacctgct ccagtcccat tcctctctt tctgtttttg 3000 taacacctaa gttgtttctg ctctcagggc ctttgcattc gctcgcccag aatgctcttc 3060 cactcacccc tgaagacagc tgctgtattc tctttcttat gtctcagctc agatgtcacc 3120 ttgtcaggga ggcctttcct gactgccctc tctaaagtag gctcacctcc cctagtcaga 3180 taattttgat accctgctta ttttcttcac aacccatcgt aatctgttaa ttatcttgtt 3240 tttgtttact tgcctatagt ctgtcttctc cattagcagg taggctctat gagggcagcc 3300 acgttgtcca gttagtttcc tctgagttcc cagcaccaga cacagtgcct ggcatatagt 3360 aggtgctcac taaatatctg ttgaatgaat tgtgaatgga tgaatcaatc attcaataaa 3420 ctgtgagacc cttgagggtc tcacatctgt tcatatctgt ttccctagta cggaacttgg 3480 catacagtag gttcagtata tgttggaatt aaatagatct ttttttttt ttttgagatg 3540 gagteteact etgteaceea ggetggagtg eagtgetaea gtettggete aetgeaacet 3600 ctgcctcccg ggttcaagtg attttgctgc ctcagcttcc cgagtagctg ggattacagg 3660 cgcccgtcac tatgcctggc taatttctgt atttttagta gagacggcat ttcaccatgt 3720 tggtcaggtt ggtcttgaac tcctgacctc aagtgatctg cccgcctcgg cctcccaaag 3780 tgctttgatt acaggcatga gccactgtac ccggccattg tttctttcat ttctatgtct 3840 ttgacaagga taaaccattt tgtttttgtt tattgtttta tttattttga tgtcaatgtc 3900 tttttatatc ctctgttcac ttaatttggg aggtcttgaa gttttttctt gcacatagaa 3960 atgagettge atatgeatgt gtgeatgtat ttaatatgat gtttgataea aatatttttt 4020 cactctattg gtttattgtt ttagttttgt aattctttgt tattctttca tagaagtttt 4080 gacacactat tttgttttaa ctaagtttgc tgtaattaat aggaaggaaa tctgttactt 4140 tettttgtge tetgetgtta tagattatet ttattacata tatatatata tagtettata 4200

tcccaccatt cagagatgac tattgttaaa tgtactttga tttctacttt ttttgggttt 4320 aatggctatt ttattttgtt ttattttatt taacacaagg tcacattctg tcaccctggc 4380 cagagtgcag tggcacagtc atgctcactg tagcctccac ctccgaggct caagccatcc 4440 ttcccactcc agettetgaa tageteggae tacaggeaca tgccactatg cetggetaat 4500 ttttgtattt tttgcagaga tggggttttg ccatgttgcc caggctggtc ttgagctcct 4560 tgttttgttc aagcaateet eecaeettga gattacagae atgageeaee aegeetgaee 4620 tgataatttt ttttaaaagg ttgtctagtc ttgctaagaa taagcaagac gtttcgttta 4680 ctaatgtcat gatttaacca gttttagctg ctctgatatt aaaaggtgtt tttgttaata 4740 tacttctaaa atattggaaa taatcagagc tgggtgggga gagagaacta agcccaaaat 4800 ctctaattta caatqctqta acattttgaa agaccaatct tgtttttgat ttctactttt 4860 taaaaaagtg tcatagtgca ctttgttttt cactttaaag ttttatatat tgtgagcata 4920 tggttttctt taaatactga cgtgttaggt ggacttttaa atatagaaac attttaaatg 4980 ttcattgagt gctctaaaat aatacatatt tagtgtgtgt attagtttgt tctcacactg 5040 ccaaaaagga atacccaaga atgggtaatt taaaaaggaa agaggtttaa ttgacacagt 5100 tctgcatgga tagggaggcc tcaggaaacc tacattcatg gcagaagggg aagcaggcac 5160 atcttacatg gctgcaggag ggagaggtgt gaagggggaa cttccaaaca cttttaaaac 5220 catcagetet catgagaact eceteactat cataagaata geatgggega aactgeeege 5280 catgatccaa tcacctccca acaggcccct ccctcaatat ttggggatta caattcaaga 5340 tgagatttgg gtggggacac aaagccaaac catatcagtg tgtaaagatg caattcaaca 5400 aatgtgtatg agcacttcac aaatgcaaga tacgatttgg tatagggtgg aatcaagagg 5460 aggcaagtat catgggagtt ttataagaat cttggcaggc aaaattcagg acagttaccc 5520 cagtccatga agagagattc tccttttatt gccaagatgg ggctttctta cttgctgttc 5580 cattttattc tagtttgtta tgctttcaaa agtgtgaatc tgtctggaat gtattgcaat 5640 agcacttacc aagtgtgtcc ctagactaag aagacagaag actcaaataa ataaaattat 5700 aaatgaaaga ggagacatta caggatacca cagaaattca aaggatcata agagaccact 5760 actagcatga ataactatac accaagaaat tggataacct aggcaaaatg gataaattcc 5820 tagacaaata ttacctacaa agactcaatc atgaagaaac agaaaatctg aatagaccaa 5880 tagtgagtta ggagattgaa tcagtaatca aaaacctccc aacaaagaaa agcccaggac 5940 cttatggctt tactggtgaa ttttaccaaa catgtaaaaa agaattaata ccaatccttc 6000 tgaaatgctt ccacaaaact gaagcagagg gaacacttcc aaactcattt tacaaaacca 6060 caattacctt aacaccaaag ccaaatacac cataagaaaa gaaaattaca ggccatgttc 6120 acagatatgc aaaaatcctc aacaaaatac tagcaatcca aattaaatag cacattaaaa 6180 qqatcataca ccatgatcct tttaaagtgg aatttatccc tgggatgcaa agaaatttta 6240 acatgtctga atttataaat gtgatgtact ataatattac cacaatgaag gataaaaatc 6300 atatgatcat ctcagtagat ggagaacaag catttgacaa aattcagcat cctttcatga 6360 taaaaacttt caacaaatta ggtatggaag gaatgtacct caacatgata agggccatat 6420 atgacaagct cacagctaat gttatactca acaaggatcc taaggtcagg agcaagacta 6480 agatgeteae teteaceaet tetatttagt gtggtaetag aagteetage cagageaatt 6540 agagaagagg aagaaataaa agtcatccaa atgggaaagg gagatgtaaa attgtctctg 6600 tttgcagatg acattatctt atatatagaa aactctaagg cttggcgtgg tggctcatgc 6660 ctgtaatcct agcactttgg gaggccaagg ctggtggatc acttaaggtc aggagttcaa 6720 gaccaccetg gecaatgtgg tgaaaccetg tetactagag atacaaaatt atccaggegt 6780 aaagatgtgt gcctgtaatc ctagctactt aggaggctga ggcatgagaa ttgcttgaac 6840 ctgggaggca gaggttgtag tgagccgaga tcatgccact gcactctagc ctgggcaaca 6900 gagtgagact ccatctcaca cacacacaca aaggccggcg cagtggctca tgcctgtaac 6960 cccagcactt tgggaggccg aggcaggcag atcacttaag gtcaggagtt cgagaccagc 7020 ctggacaata tggtgaagcc ctgtctctac taaaaatgca gaaattagct gggcacggtg 7080 atgggtgctt gtaatcccag ctactcagga ggctgaggca caagaatcat ttgagcctgg 7140 gaggtggagg ctgcagtgaa ctgagatggc gccactgcac tccagcctgg cgacagagcc 7200 aaaaactatt agacttaata agttcagaaa attagaagat acaaagttaa catacaatgt 7320 ttctatatgc taactatctg aaaaagaaat caagaaaact atcccattta taattgcatc 7380 aaaaaattac ttaggaaatt taaggaggta agagatgtgt acgctgaaaa ctagaaaaca 7440 ttgatgaagg agataaaaaa ggacataaat aaatggaaag ataccccatg tttgtgaatt 7500 ggaagaatta atactgttaa aatgtccata ctacccaaag cgatccatag attcaatgca 7560 gtccctatca aaattccaat gatcttttcc ccagaagtat aaaaaaatcc taagatttgt 7620 ataaaaccac aaaacatcct aaatagccaa agtatcttgg gcaaaaagaa gaaagctgga 7680 qqcatcacat tatctqattt caaaatatat actaqaaagc tataaagtaa gcaaaactgc 7740 atggtactgg cataaaaacg aacatataga ccagtggaat agaatagaga gcccagaaat 7800 aaatccctqc atttacqqtc aattqatttt caacaaacqt accaaqqqac ccacaatqqq 7860 gaaaggacag tettttteca taaattggtg gttgggaaaa eetatatett eeacatatta 7920 gaagaataaa attggatggt atttcacacc atatacaaaa tggattaaag actttcagat 7980 tgactttttt gtttttttt ttggggatcc tttagattca ctttctgccc cacagttttg 8040 aaaggcagac ccagttcagg aaactttttt tttttatttt actttaagtt ttagggtaca 8100 tgtgcaacaa cgtgcaggtt ttttacatat gtatacatgt gccctgttgg tgtggtgcac 8160 cccttaactc atcatttaca ttaggtatat tttttaatgt aatccttccc ccgtccccca 8220 accecaaaac aggeetgggt gtgtggtgtt ceceaacetg tgteeaagtg etgteattgt 8280 tcaattccca cctatgagtg agaacatgca gtatttggtt ttttgttctt gtgatagttt 8340 ggtcagaatg atggtttcca gtttcatcca tgtccctaca aaggacagga actcatcctt 8400 ttttatggct gcatagtatt ccatggtgta tatgtgccac attttcttaa tccagtctat 8460 cattgatgga catttgggtt ggttccaagt ctttgctatt gtgaacagtg ccacaataaa 8520 catacgtgtg catgcatctt tatagcagca tgatttataa tcctttgggt atatacccag 8580 taatgggatc caaccaggaa actttgagga ggtcagagag acgcaagttg tcaactctgt 8640 tcaccccage tcagagggag atggtggete tetgggtggg agteatettt cacctaggaa 8700 acccacctgc ccaagccatc tcattccagc tgtaaaggga acaaagggga ggcaagagga 8760 caggggttcc actcatccct ttgctccatt ttaaaccttc ttcctggcac ctttaggtaa 8820 acagctaagc ctgtgtaaat tcaaccagta aaatgatctg attgtcagtc ctctgctgaa 8880 agcccttcag ttgatttccg gtgcgatgcc aaaaaaagct aaattgcctg agacccctgc 8940 ccacctctcc cacctcattt catgccactc ttttctcaca tttcagtttc tcacatttac 9000 tgacttettt ettgeeteea agtettegee tttgetgtte eettagetae teeageattg 9060 gctcattctc atcttaaagg cctcggcttg aatgttgcca tctcaagaag gccttttcca 9120 gacatcctgt tcaaagtagc ccccaccaac ttatgtggtc atattttaca gggatgaggc 9180 tctaaagacc atatttaagg caagaatcat atggtcaaaa ttatcattga aaatccctta 9240 tectgtaaca tgecagacae aettacaace ceaaatetet geatagatet etetecetea 9360 tecetteagg tetttgetea aatgtaatgt teteagtgag aaetteetga etaeceaett 9420 caggetggga gtgaeggete attettgtaa teecageaet ttgggagget gaggeaggag 9480 gatcacttga gcccaggaat ttgaggccag cctgggcaac atattgagat gccatctcta 9540 aatcaaacaa acaaaaaac tgtaacattt ccattcctgc cccagcattc tataatcccc 9600 ttcagagect tactttttcc tccatagatc actgtctaac atattataca tttcacttag 9660 aattaagtto tgagggcaaa aatttgttta ttttgttcac tgctgggtcc acagtgccta 9720 aaatactgtc cttcatgtaa atgttcaaga aattactgaa tgaaggaatg aatctttcag 9780 gcctcagett gggtgtctct ctcctttctc ttactttcta ttccttcatt aggggttcca 9840 tctccqqqct ttcatqcatc ctqtatttqt ccctattaaa qaactactqa tcacaatqta 9900 ctgtagtttt cctctctaaa tacttgtctt cctgcgtatc taatcctatt gattccataa 9960 agacagggag tgtttctcct actttctagt gtgatctgga acctaagact gtgcttacca 10020 cagagtagac acttagtgtc ttttgaataa actagtttgg gtggtggtgg tgcggtaccc 10080 ctgaatggga gtgggggatg tggctccttg tcagctcctg aataggtcta gatcctgcac 10140 taggaagacc attgactggc atgagctggg ggcctttaaa ataacctcag aatagcacct 10200 gggaacaagc cagctccata cactagtgag ccccaggcag ggaggcacgt aggacccccc 10260 caatagcgct ttctgttttt ccactcagtt aggtgacctt ggggtaggat cgccaaataa 10320 aatacaggac atccagataa atttgaattc agaaaaacaa tgagtaattt tttagcatac 10380 gtgtctcatt gcaatatttg ggatagtctt atactaaagc attactcgtc gtttacctga 10440 aattcaactt caactgggca tcctgcattt tatttgctaa atatggtaac cctactctgg 10500 caagtccctg tacgctgcat gtccctctct gggtttcgct ttctccatct gtggaatggg 10560 cacagttctg tgagacttgc ctcagggatt cctcaggctg agcaaatacc ctcatggatc 10620 gtccctttgt cctggtgagt cgtatgggaa gcgcgcttgt ctgaggagtt tttcgctgtg 10680 taaatatgag aagctccttc ctccaaaagc ctccgttttc tcatctgagc atatgagact 10740 ctcagaagtg gaaacgattg cctggcggaa ccatgactgc tcagtttcca gccaccggaa 10800 cccccagctc acggccccca tcccttgaag ccacggtttt ccggtagcgt aaagtcactt 10860 ccgtattcga gagccttcta ggcttcgagc cacgcgatgt cgcgcctct ggcggctggg 10920 aggagggacc gactttacca aacggtgaga aggaacaggg aagtccattg gttgaaagac 10980 ggagaggcgc agctcagttt tccaacctca accaatgtta aaccgaacct tcgccgaggg 11040 cggggctctc acgggaaagg ggtcaacccg ggactgaggc ggcgtgggaa gcgggcgacc 11100 ttatctctgc tcagctggaa aaaggcccag ggtaacaccg gaagtgggct tatttgcgca 11160 tcagctactt tcgcttctac ttaaaaacgg aggatctggg taaaagaacc gaaaggctgt 11220 acgaacctaa gacttgtctc cgatgtcctt ctcaaccatc aatttcatat gcgagggaaa 11280 acacctgctg ggttcacgca gaatataaag gtctttgaaa taattcttga tctctaggcc 11340 aaggagtttt acattttaaa ataatcaagc gtgcctactg cttgccaggc cctgctctcg 11400 ccttcactcg cattattcaa ttaatcgaca caggcctgtg cagtgcgtct taatgacaag 11460 gactectace etecaetgee tgtgttggaa teetggttet geeagttatt agetgtgtat 11520 cctggcctaa gttactctct gccacagttt ctgactctgt aaaataggat aatagtatct 11580 accttatacc attattctaa agataaataa atttaacata tttaggttgg gcacggtagc 11640 tcacacctgt aatcccagca ctttgggagg ccgaaggtgg aaggattgtt tgagcccagg 11700 agttcaagac cagcccgggt aaaatagtga aactccccac ctctccaaaa aaaaaaaaa 11760 aaaaaaatca gccaggcgtg gtggcaagca cctgcggtcc cagctactct ggaggctgag 11820 gtgggaggaa gattgcttga ccctgggagg tcaaggcttc attgagccgt gagtggggca 11880 ctgcactcca gtttgggcaa caaattgaga cctcgtctcc aaaaaaacaa aaaatttaac 11940 gtatttaaag cactcagaac agcacctgac acatggtaac cacagtaacc aggtaagtta 12000 ttttcattta caaattgaga aatgaggett acgtatgaag taacttgtet agaacagata 12060 gcaactagtg gaggcagatt gggaaagtct ctgcctaatc tgaatctcaa tcactatacc 12120 tgccccacce tetteetgtg tetacaggga geetgttatg atcetaattg cetttaaage 12180 atcagatgta tttatttggt agcatcctat tacaaagtgg ctgctctctg ggcatttttg 12240 taattttaat gaagttggtg aggtcctata acttgtctct cagaccaggg gcaaggcttc 12300 tgggaaaagt cagaatggat ggcttcaaga tccacctcct actaaatcct acttatggaa 12360 aaatcagtag aaatgaactt ctgaacatgt ttcatttgag atcttttcag atatccaagt 12420 ggagataatt gtgatttggt gtggtaagtg ctgtgttagt ggaaagcaca gggcaccaag 12480 ggaggtctga ttagggatag ataaagctgc cggccaggat taggacaggc gtggcaaaag 12540 cagcaggtct tggtgaatga gtaggagttg gccaggtaga aaagtctggg gaagttgagg 12600 ggagcattcc agaccagggc actggcgtgt acaagggaat ggtattttga tgattcagag 12660 ccctttctgg gaaccggagt ataggatgga aggtaagaat ggaatggaga ttgggggcat 12720 attacgaaga agtgatctaa gaagacactt cttatcaact aagacagacc ctaagattaa 12780 agaaaccaaa gttaaagtta cttatgggtt gggggttcat catatccctc ctaactctga 12840 tttacaaccc aagaccacta caactttgat tggacagagg accggcctta caaacattct 12900

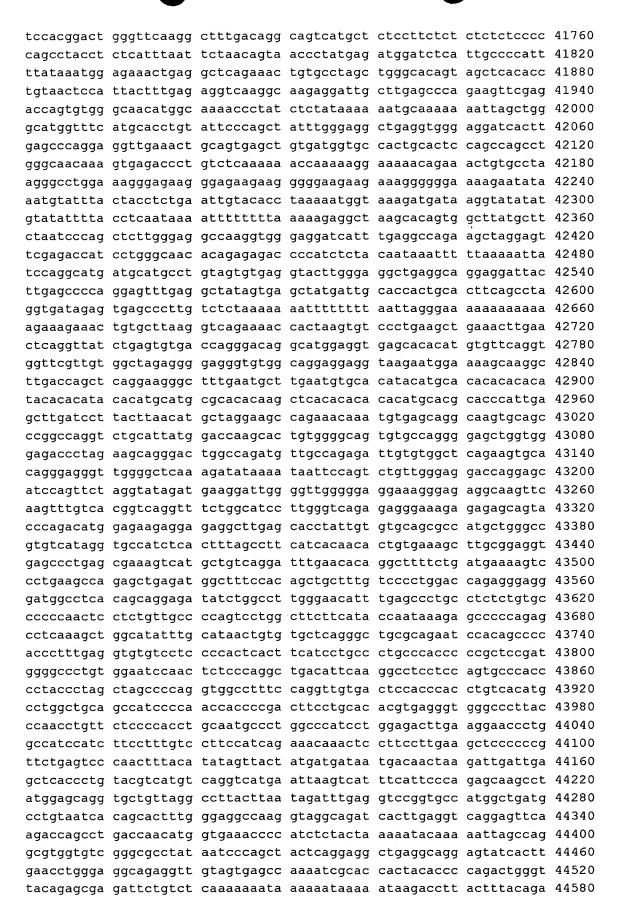
tttttgataa gcaactgcag accttaagcc agtttcacca gctgataaag gcggtacaca 12960 gactgtcttt gggtcctgtg gttcatcttt tgatataaag agtcaaattc tacctcattt 13020 taatgctaaa attttgcccc aaagtgagca tgggatgagt gttacatata tgtttacgca 13080 ttgtgcatgc actcagctcc cctcataaat atatatagtc ttcccccaca atctgctaaa 13140 tatgtatgac tettttgtgt aaatatggac ettgtgagge ataaaaeeea aeetgeteet 13200 tecetteteg aagagaaaac acatttggte eacaetggag attetettee tggtttgeaa 13260 actaatatca ccgataaagc tctccttttc tactatttac ccattctggt gatcttttgg 13320 acaataaagg gtgatgttcc gaagtatcag caagtcatca gaatttctga gcgggggaga 13380 gaggaggtca gctttgcaca ttatttattt atttattttg agacggagtt ttgcttttgt 13440 tqqtcaqqct qqaqtgcaqt qqqqtcatct tqqctcactq cagcctctgc ctcccgggtt 13500 caagegatte teetgeetea geeteeegag tagttgggat tacaggeatg ageeaccatg 13560 cctggctaat tttgtatttt tagtagagat ggggtttcac catgttggtc aggctagtct 13620 caaactcctg acctcacgtg atccacctgc cttggcctcc caaagtgctg ggattacagg 13680 tatgaaccac tgcacctggc cgtagctttg cactttagat ggtgcactag gaggcaagga 13740 agaggatgcg gtaggcagtc tetgagttgt cettaatgat tteacatece agtatteaca 13800 ccctggtgtg atttcctccc gttgagtatg gatggaattt attgattcca ttctaatgaa 13860 taaaatatgt tagaagtgac gggttgtcat ttctgagatt cgattacaaa aactccctgt 13920 ggcttctgtt ttgggcacct tctcttgctc tcttgctcac ttgctcttag ggaacacagc 13980 agccatcttg tgaactgccc tgtgggtagg tctatgtgtc aaagaacaga tgactaatca 14040 acggctagca aggacttgag gacttctaac agctgtgagt gagcttgaaa gtagatcctc 14100 ccccaggcaa gccttagaat gactgcagcc ccagccaaca cctgattgca gccatgtgag 14160 aggccctaag ccagaggacc cagttaagcc atacccaggt tcttgaccct cagaaaggga 14220 gataagtaat attcgtggtt ttaagtttta cctaatttta aggtaatttg ttaggcagca 14280 atagataact aatacagagg gattagaagc aaagacagaa gtagagaaat taggagaggg 14340 tggtggttgt aggccatctc tctaataatg agaacctgaa ttgtgcagtg gctgtgcagg 14400 tgaagagcag aagatgaatt tgagatatgt ttggaaaaag aacagaagac atttggcaat 14460 ggagttggat gtgggaagga gggataaggc agaggagaga gcaatgccag tgtttggtaa 14520 tgtgagggat ggtatttgct agagctgcca gcatgcaggt cactggggat gagttttaaa 14580 agtggctcct tgagatttct ggcaacaaca agatagatca acaaagcaga ctcaaggttg 14640 gtcaaagaaa acagccactg tgagctgggg aagaaataat gcagaaaaat agaatcaagg 14700 aagagctgga gggaattete ttteetgagt ttgatttaet tgteaaagtg tatggtatae 14760 catteteete tteatetage cattetete acaaatgttt actaagtget ttetetgtge 14820 taggcactgg ggacaaacaa gtaaacaca aagtccctgc cttcatactg ttcataactt 14880 ggttgcagag aaacagtaag attgaggcta ggacttttta gccactcctg cagggctctg 14940 agggtctaaa tctgtgctgt ctgttatgtt agccaccggc ttcctgtggc tatgagacac 15000 ttgaaatgtg gccagtccca attgaatgtg ttataagtgt aaaatacacc ctagatttca 15060 aagatgtagt tcaaaagaaa agattgtaaa cgatttcaat aatttttaaa tattgaatat 15120 tgattttagt attatcattg gataacattt tgtatgttta aaagaaataa aataaataat 15180 taaaatatat taaattaatt tcacacattt ctttttaaat tagtgaaatt aatttaaata 15240 atagatttta cttattttgg ctattagaaa atttaacagc caaaatatgg ctattaggaa 15300 atttaaaatt atctattaaa tatacctcac attatattta tgttggacct cactgactaa 15360 atctgtattc cctaccaact ttatctctct cagtgacttt aattttagtt aatgaaaggt 15420 ttgttttttt ttcattgaaa gtaacagaaa ccttgagggg aaatgaaaat taaatgttag 15480 gggaattgat tgcaagggcc ttctgaatca aggcatggtt gattgagcag tctgggcaag 15540 gagcaggctc gaggggcctt cgcagcaaag cttcacaggc attaatgtga ccgggctcca 15600 tttttgaatt tgacctccca cattccaatt tctgagaaga cagactctga tcagctcagt 15660 ttaaatcagg gtgtatctac tctggatcca gctgctacgg ctatgggaag aacgcactgt 15720 gagetgeeta etgetttttt eccaecetta ecetecagee actatgttee etaaaaggea 15780

gcgtgagctc tccagtctct aggggtcagc aaaccttttc tgtcaagggc cagatagtca 15840 atacttettt tgetttgtaa ttettagtgt ttettttgea aetaetteat tetgeeetge 15900 agagcaaaag ctgccagaga caatacataa gtgattggac atggctgtgt ttcagtgaaa 15960 cttcatttcc aaaaccaaga ggtgggccat agtttgtcaa cccctaaact gtactttctg 16020 ttccctctgc ctggactatc ctttcactcc ttccttccag caagtgccta gtcatccttc 16080 tggtctcagt tcagatgcca cttcttggag gctcccccta accttcctct cctgactggt 16140 tagttgctcc ttctttatgc tcccacagac ccctgtatcc catacatgca cttctcatac 16200 tctgttgtca ttgttctttt ctaaccactg gcttactaat tctgggtctc atttgttata 16260 aactcaccac ctggcactcc tggcacatgg cacgcacttg agtgtcattg gatgagtgga 16320 agaaaccatg aaccttgtgg ttgacacata gtcagactag atgtcctgag atcttgggta 16380 gtgatgagaa ttctgggctt ttaaaattag cggcatgaga ggcacctcct gtaactccaa 16440 tacttcagaa aagcatgggg gaatgtttta agatgggaga agtggaaaat tttaagggct 16500 gcaagccctg gataatgtga taagccacac ctcagctggg gtgaaaccag gagtgcactc 16560 cttggaggag gctttgtgct ccttggtaag gttccctgcg gaggccccat caggcccagt 16620 gggtcaggag agagacactg tggggtcgag ggcagccttg gcccatagtc acttacagtt 16680 acagttacag ggcagcagaa tggaccttcc ttgacccaag ggcttggtga gtaacattca 16740 acagatectg gacaagggea aeggaggetg tgaggecaaa gacagtgete atggeetttg 16800 cgaggettta tecagetaag cacattgtee etgtegeete aagagaggaa ggagagttte 16860 tctttttaat gtcactctta aatgtcacac ctttgggcaa tacagatctg atagggcctt 16920 tcctgggtgt tttgcacaat aagaccaaga gtaaaagagc agtggatctt ccctgtcatc 16980 tgggaccacc ggcggcacgt tttccattta tacagctgat gaccagcaga gtggatgagg 17100 agagcagggc cgggatggtg atcactgcag cttgcaagcc acccatgcct ggccaaaggg 17160 atggggcatc agggcactgc agcttgtaag ccacccacgt ctggccaaag agatggggtg 17220 ttagggcaag ggcagtggaa tgctccccca gggcaggctg tggttttggc cctcagcagc 17280 cttggcccac acaacactgg gctcccacga cacggaggag gcatggtgca gagaaaaagc 17340 aggctgagag gcaaagattg agtgaccttg ggcaagtggc caattgttct tcccctagtg 17400 tttggcactt agaaggtgct gggtacttgc ttgtggaccc aaagggagag atgtgatcct 17460 aataccacca gatgetttae atgeettatt ttaeteaace tggegagetg eetetgetgt 17520 taccacttac cagctggtga agctgtgatg ccaaggctgg cttctctgag gctaaaacgt 17580 ttataagggg cagaggcagg atttgaaccc agatccgcat gttgccaggc cttcatgcta 17640 tccatgtgct tccccacaag catgctctga acacttaccg tgggccaggc atgtggccca 17700 gccccgtaag acaccacctg gcacgtggca gtccctcaat aaattttagc tgtcattagg 17760 cattactgtt atttcgactc atttgatcct cacagcaacc cagcaagggt aggtattttt 17820 gttcctattt tccagatggg aaatctgagg ctatcgtggt gaagtgtctg gcctaaggtc 17880 cacagctggt taagtggcag ggccaagaat taagtgcagg tggactcttt tcccatgtta 17940 gctaaggcgc ttaggtagca gaggaatcca ataatactgc ctctgtttat ttagttgaag 18000 aatgggaagg agtcattgga aaaggagtaa atggagggcc tttaaaggac tatcctatgg 18060 aaaggagggg gtcagaaaac agagctagga ccaccagaga cacaagggga cccatggaaa 18120 gaaagacctc ctattccggt agtaggatgg gctgctgcac agatagtgag ctccctggca 18180 ccagacatgt ttacgcaggg aagctgtggc atgggagact gcaggaattt tctcttggtg 18240 ctaggagtac atgcgggtct ttgggttttt ggcccacagc agctgccagc ttgctgcgcc 18300 tgccctcttt gggactcttg agaaataggg gagcgaggat gagttgtcag ctctgaaaca 18360 gtcctgtgct cccaggagaa atccctggct cctcatttct tccgtcttct acttcctttt 18420 ccatcccacc cctggcctca gcctcaccag ccttgctgct ttcccgctgg gttccctccc 18480 tgcctccagc tgtgtttcac tccacataaa tatgaccacc ctccttccct gattaaaacc 18540 attcatggat ctgggcgccg tggctcatgc ctataatccc agcactttgg gagccgatgt 18600 gggtggatca cctgagtcag gagttttaag accagcctgg ccaacatggt gaaaccccgt 18660

ctctactaaa aatacaaaaa aaatttagcc gggcatggtg gcacgtgcct gtaatcccag 18720 ctatttggga ggctgagaca ggagaatcac ttgaaccttg aagcgaggtt gcagtgagct 18780 gagatggcgc cactgcactc ctgcctgggt gacagagcaa gactctgtca aaaacaaaca 18840 aacaaacaaa caaaccaaac aaaaacaacc caggtccgca tgctgccagg ccttcacgct 18900 atteatgtge ttecceacaa geaagetetg aacaettace atgageeaga catgtggeee 18960 accccaqtaa qagaccacct ggcacgtggc agtccctcaa taaattctag ctgtcgttag 19020 gcattactat tatttcgact catttcattc tcacagcaac ccagcaaggc ttctctgttg 19080 ccctcaggat ggcccacagc ccattgcttt gcccttggtc tcacattgga tcctcagcca 19140 cacagoetca ttgccagoet cetgteeetc aaacatgetg tteeteette etggacaact 19200 ttgcccagca cttactcagc atgcaggtct cagcttcagc agaacctcct ccaggaggaa 19260 cctcttctct tgagttcctg agagcctctc ttgttctcct gagtcctcaa cctatgtgct 19320 atctttqcct qqtcaccatc aqctctttqa tataqacctq qqatqcqqct gttqttqcct 19380 atctcagtgc ctagcaagct gtaggaattg ttgggtaagc gattgaatga gggagtgagg 19440 gagtgaagag cacagtgagg ggtccccagg cccagccctc cctccccacc ctgccggtaa 19500 tgtatttctt tctttgggaa ttgcccaaag ccaatacttg tctggaatga gctggggaag 19560 gtgaacccaa ggcatctatt gttgctgatg agaaattggc ttcaggcaaa acatcattca 19620 tttgtggatg tttcatttct gatggctttt cagatttttt tatttttatt gtttttcagt 19680 ctcttcaata tgtctagaaa tgaaattttt tattctactc agaactcaat gtgccttttc 19740 attccagagg ctcatttttc tttgcttgta aaaaatcctt catcattatt tcttagaatg 19800 gtgcttcttc tcccctattt cctccttgta aaactactaa tctagtataa attttggaac 19860 ttctcatttt ctcctctatg atttttatct ttcatatttt ccattactct ataatactga 19920 gcacteteta tgtgccaaaa actataaact catttaatee teatagcaae accatgaggt 19980 aggtacatta tagtatatta taacattata acattatagt atatctccat tttatagatg 20040 agaaaattga tacacaaaag gcttaaaaac atacctgaat ctctattgct attaatagta 20100 agtatcagag atttaatacc aggtgtgcgg cttcagaccc catgtatttt ttttttttt 20160 ttttttttga gacagggtca cacactcgtc acccaggctg gagtgcagtg gtgcaatctc 20220 tttgcagcct cgacttccca agctcaggtg attctcccac ctcagcctcc caagtagctg 20280 gaactacaga tatgtgccac catgcccggc taattttttg tatttttagt agagatgggg 20340 ttttgccatt ttgcccaggc tggtctccaa ctcctgggct taagcaatcc accagcctca 20400 gcctcccaaa ttgctgggat tacgggtgtg agccaccttg cccagcccac tgcactaata 20460 ttccatacta ttataatttc atctctttgt gctgctttct gtgctgcctt ctgggtaatt 20520 tetteagate aattigagig taetaattet eteteteeat eigigtetaa tetaetetti 20580 aaaacatcta ttgcattttt aatagttcat ttttgctatt tctatttgct tctttttca 20640 taagetette ttettgeett atgtettega tteetaattt tateteattt aaacataett 20700 acattaaaat ttctcaggtt gttctataat cctaattttt ggcgtatgca ccactaagat 20760 ctcccttcaa gaaagaactt gctcttcagc cacacaagtg cagttggctg actacctcaa 20820 gctgttagta ccgttactgc cttcaagata tgcctccgtt ttttagttaa ggctatgctt 20880 ttcttcggca gtccctaagc aataacttta tgaacatggc aggtgtacta tagtcttgct 20940 atttctgctc aacaagggac tttctctaac aggcggtatt tgttctataa tccccctttg 21000 tgttagccaa gactttatca catttgcgtc ccatctaagg ctctctgccc aatcttgatt 21060 ctccccattt tgtcttttac aggcattacc cctcaataaa ccccttgcac tcctaatccc 21120 gtctctgcat ttactttctg gaggacccaa ctaaaacagc atgtgaatta tccaggttat 21180 ttcatcttct gactttcttt cctagcaatc cttttcctct catactttgt aatgtttttt 21240 accatgagat tatcttcagt gggagttgtt ttctatagaa gtcctgtgtg ccctgcattg 21300 tggaggagaa tcacaggtag tttcacaaga agatccatta gtttaaccag ttccaagaca 21360 aactttatgt caatttetta getagggtte eeceaaacat caetgeeace ateagaeagt 21420 taatgcaaac atgtgaactt aattctcaca cccatactaa tgcagattgt gattacaatt 21480 qcttccaggt gactctttcc tagctctttt ctagctccac ctgagctttt gagctcagct 21540 atatattttt taatgtactt tttatatttt acctagcatt tctatttatt tagcgtaaga 21600 qataaaaqqa acttcttttc tttctacagt accccatagt caatgaaagt aaaccctgga 21660 aaagagagac atatatatgt gtatatattt ctatataatt tatgttcttg gtcatactat 21780 ctatttttta actttttatt ttggaataat tatacattca taggaagctg cagaagactg 21840 ccgaatacac ttcactcagt tcccttcatt cagggaatgt actcaggaat ctgcatttta 21900 gcaggtaatc agaggactca gatgtaggtg caggttgttg caaatgctat cagttcccca 21960 tccatatccc ttggaccttt cctaccaact gttagcaacc actcttaacc aatgactctc 22020 agcattggta tataaatacc ctggttccct tacccttcat atgcgttatt tttgagtcat 22080 gttttgcacc atttcccaga gtctccctgc taaattaacc gttaataaac cactgtggta 22140 gcactcttat tgtctgcctt ccttttcttt atcaattccc acttctctac ccaaatagtc 22200 actttccaaa taagctaatt taactcaaat ctttgtgtgg cggtctgtat ctggtcttct 22260 aagctcagat cagaagtggt cttagatccc aaggatggaa tctaggattg taaaatttgt 22320 cggccaatgg taataagatt ccattattga tggtctttaa tatattgtag aggcctagga 22380 tgaattgggg gacaagatac agatacaagg ggatacaacc atttatgaag tctctctaac 22440 atctgagaga tgtggaggca atggtagtta aagaactggt ggagtttgtt ggttgttgtt 22500 aaqtaccatt qaaqtqctaa aggaggaaaa tgatagggtc aaattagtca attaccagcc 22560 caggggatgg tatgaaacct agaaagccac tatgacagca ttttaaaaatc ccctaatttc 22620 ctacagctgg agggcagata ggtttgaaaa ccacatccag aacctaatga tgaaagtagt 22680 agaagtgtcc cactcccgtt tgctagagga taataggctt cctcctcttg cctggaaact 22740 atgcagagge etecectaag geagatgeet tgcaagatga taettgeeet etteaagate 22800 tgcttctaca ttctcttgcg tcttctaggt caatcactag ggttaaatct catcactcaa 22860 ccattgagga ggtactatct ctgcttaaag aaacaggatt ttggccaggc ttatgcctgt 22920 aatcccagca ctttgggagg ctgaggcagg tgaatcacct gaggtcagga gttcaggacc 22980 agoctggoca atatggtgaa accocatott ttotaaaaat acaaaaatta gocaggtgtg 23040 gtggtgcaca cctgtagtcc cagctacttg ggaggctgag acaggagaat cacttgaacc 23100 tgggaggcag tggttgcagt gaaccaagat cgtgccattg cctgcctggg ggacacagcg 23160 agactccatc tcaaaaaaca aaaacaaaaa caaaaacaaa aaaaaggatg tttactaaaa 23220 gaactgcagg acctgcctaa tagataccaa taaaaagctg gaagatgtgc ctgctttggg 23280 aagggaagga acataggaag aagggaaatg gaacataggg atggagaaga gaagagttgt 23340 tgataaggag gaagtctcct gagcttctgc acttaccatc ctggcaagaa cacttggagc 23400 tgggatggtt cagaggacaa aaggatcagt gtccaatcag gaggtagaaa ctacaccact 23460 aatttaaata gagatctaat gtagtgtatt cttaagtagg tataaaatta ttaagtaggt 23520 aactgcaaag gtaaaaagag aatgctaagt tgtcacaaag atagcaatga caaaagcaga 23580 taccatgccc acggctggtg aaacaaaata agaagtggaa ttatcaaaat ttagaagctt 23640 acaaqagaag ttccaagaaa ccaaaactca gatctctgag gaggaacacc aaagtgttgg 23700 aaactggtgc taggaagtgt tgggaaactg caaactggat tcagctgctg ctaaggaaag 23760 atgctgctga tgccagggtg aagaagcgtt gctagggtga tgctcacagg aacaggaagc 23820 tgacaggaag tcaataggaa gaagcaagtc cctccttcct gatgctgcga catcaattcc 23880 ctcctgccct cctcattggc aggcataaca gggagcaact ggcaatgctg gaatgtgaat 23940 ttctgaaccc cagccccagc actacacaag ttgatacaga agggtggttg tggcgctaag 24000 aggtgacagc ttaactactg acaagagtta caataaacaa tgtagaaatg tgtgaactga 24060 cataactgga gaaaggagtc aaaagttcag aggagaaatg tattgcctaa aaccaaaaga 24120 ccaccagett agtagettag tatgtttcca gtacacette actggageaa taaagaatga 24180 gctcctgaag gggcactgac atcattgagc aactcagtgg tggctgcccc ttctatattg 24240 tgttgtagct gctagggaac tggagttcct actgtttctt aatggtgaca ataggattcc 24300 agaacagcag aggccaggta gcagcactta accatcagac acatagtgta tggaattacc 24360 ataatgggca gcaaagtcag aaactcaacc aaggggccct tacccacaga gatttgtggg 24420 attgctaata gaccatgaag ttcctaaggg cgagatcagt gggtgactag caagggtatt 24480 gctgcccaat ataataaaaa cagatcaaga gcatgtaatg tgaagactga ggtgagccat 24540 cacagtggaa aatcactatc cctcacccat ttttcatgct taagctagtc ctcagaccca 24600 gtaccacagt aactgtacac aggagaacaa aaatatccag atatttctat agttggggaa 24660 ttcagagtcc ggactgacac tgattccagg ggatccaaat tgccactata gccctcctgt 24720 taaagtaagg agatatggag gcaagatgat aaatggagtc tttgccaaag cccattttac 24780 agtgagtcca gtgggtcttc acaccctcct gtgactattt tccccatccc tgaatactta 24840 attgggatta gtaaactcag caggcagtaa aaacctcaca tcggtttctt aatctgtaaa 24900 gaaactggtg agggtcaccc aaagcagagg tgacaacagt atgtgtatat atatatatgt 24960 atacgtatat atatatat atatatatgc tggaaagtga atttttgaac cccagcccca 25080 gcactacaca agttgataca gaagtgtggt tgcggcgtta agaggcaaca gcttaacaac 25140 tgacaagagt tacaataaac gatgtagaat atatatatat gggggatcaa ctgattatat 25200 agccagagtt teceattgta agttgtgtae tgteagatee acceaactgt atagtegagt 25260 atgtgcaaca gttatcccat tgaagggtgg acctggaacg ttgtcatgaa ataggcctga 25320 gcaggaccat aggtcacaaa taaactacag aagcaggccc agaatcccct gttgtgatcc 25380 ctgcattgga acctctcccc tcagctcaca cttaggaaat catgagagat tcctgatgac 25440 caggtgacag aggaggaaaa agcttaggcc tggtttatgg acaggttggc acaataggtt 25500 agtggaaaac aaaaatgcac tettaetgea etacagteee aeteaaggge teetgaagaa 25560 cagccatgtg gagaattttt tgcaggggca gaactttagg cggtgcattg agtcatcaac 25620 ttggtgcaga aagagtcgtg gcctgaggtc aggaatccca ggcagtagtg aacagttcag 25680 ctgattgctc agggactcgt gaagagcaag actgcaaaat tgcagttaag gaggtctggg 25740 gaagaagcat gtggattgat ctttgagaga agacacaaaa atatgtgggt ctctgtctca 25800 tttcattgtc taccagaggg tgtccatcgc aaagaaggtg ctgaacaatc agttagatag 25860 gatgattcat ccagtggaaa tgagcttatc tctctcctta gctgccccag agcatgcaca 25920 acagacccat aactgagaag ccatggtaag agggatggaa gccacgcatg gcccaacagc 25980 atgggettee tetggeegag getgaeetag gtattaetae taagtgteea atetgteaaa 26040 gcacaggcag ggctgagctc ttgacatggt accacccctc aaggagggca cccagccaca 26100 tggtqccagt tgattacact ggacccaacc accctggagg tgctgtgact cttctatgac 26160 ttcatgggac tgatacagat ttgccttctc tgtccacaat gtcatgatca gcagcactct 26220 ctcagaqttc ccaqqqtqtq caqtttatca tcaaaqcatt cccccataac atggccatgg 26280 agaaagtgag cacatgacca tgttattcac tggtcctgct atttaccata ccaaccaggg 26340 ctgcatcctg agaaaatgct ggaataacca cttgaaggca tagctaattc atcagcttga 26400 agatagggtt gagaacctgt ccttacatgt ttgtttgttt gtttgtttgt tttgagatga 26460 agteteatte tgttgeecag getggagtge agtggeacaa tetettaett eaacetetge 26520 ctcctgggtt caagggattc tcttgcctca gcctcccgag tagctgggat tacaggcaac 26580 cgccaccacc cccggctaat ttttgtattt ttagtagaga cggggtttca ccatgttggt 26640 caggetggte teaaacteet gaettegtga tetgeeegte teggeeteee aaagtgetgg 26700 gattacagge gtgagecate acaecetgee tecettacat gtatteetat aettgagaca 26760 atagctattg taagggtgct acatccccaa cagtcagaat acataggtct ggaagccaag 26820 aaatgagtgg ceteteteae etttatteee aatgaceeae ttggcaaatt tatgetttet 26880 attgccaaag ctttaggctc tgttgaacca gagatcctag ttctcagagg gtagggagag 26940 atcacttcta ccagaggaca taattgtggt tttactaaac ctaaaattat atctgcctct 27000 ggtaattttg ggatcctcat gacagcagac cagcaagcta agaaaggaga ttctgaacag 27060 gcaggagtaa gtgaccctg ctggaccagg tgaggggcat ctaaaaaggg tagtaaagtc 27120 ggaagctgag catcagttac actttaggac caactacagc agtggggtct ggaaattgtc 27180 cetectetta tetgttatee tttetacete tteetettee ttetteteet etettettgt 27240 aacaaatcgt gactttccac cacccaaaga agcagtgaca gaacatgaaa cttaatatga 27300 atgcaagttt atctgagdag gtgcaagggt gaactgtgac acatactgtc aatgccctgc 27360 cattgtccct caaacctgtc aatgtattcc caagacttcc aactgccagc atccacatgg 27420 tagctaaggg atcattttcc cagaactaca gagagctgac tgtacacatc acagttcaca 27480 agtgccaaag aattaaacac caccagggag cagcctcaac actcaaacat ggtgtataaa 27540 taccccagct ccctcaccct ttgggtggga tgcttctgag gcatcgatca ttctgaggtt 27600 ttgtaccatt teccagagtt tecetgeagg ataaatette agtteeeett tgtgataata 27660 gtgcaccett atggggetge ettecettee etgtateace tteceaette ectattagtg 27720 ttacttatgc tccccaaata aactattttc actttagtcc ttatcttaag gtcagttctt 27780 ggaagaaccc atgctaagac acatgtggct caaggactat gcattgagaa gccctaattt 27840 agagagtgaa ctcatttcta ttttttaaaa atatctttct ccctctctcc cctgactccc 27900 cttctcctta cccctacacc cgagtttgtg tgtgcacaca tgtgcacaca tatatagaat 27960 atatgaaaaa gatctgagga tatgatccaa gtattaacaa tagttctttc tgaatggtgg 28020 cttcttagtt ttcctctctt ttgtttttct acagcagcaa ctgtgtctcc gaaagtattt 28080 ttaattggca attaggaaat gatgagtgga gtggtggggg agcagagcca ggctgcagtg 28140 ggctgatgct ggcccaagag gatgcacagg ccacagtggg ctgatgctgg cacaggagga 28200 tgtgcaggct gcagtgggct ggtgctggcc caggaggatg tgcaggctgc agtgggctgg 28260 teetggeeea ggaggatgtg eaggetgeag agggetggee etggeeeagg aggatgtgea 28320 ggctgcagag ggctggtcct ggcccaggag gatgtgcagg ctgcagtggg ctgctgctgg 28380 cccaggagga tgcgcaggct gcaatgggct gatggtgacg caggaggatg tacagacaat 28440 tctctcaaag tgctgggcta gagacaggca agaaatgagg tggtagctca aggtggggca 28500 actgtagaga gtatcatttg aataggaagt tgagcctgtt tctaggctga ggaaaagcag 28560 ccaatgacaa ggaaggagac aaaaatacag agtcaaaagt gggctcattg aaggagtcag 28620 ttcccagaag aggcctgagt ggattcaagg ggccctaggg gaggaatcca ttctcaacag 28680 aaggtgagct tcatcctctg ggaccaggga aagggggtga agatgaataa tgttagaaat 28740 gcatttattt cagtcatttt tttgttctac tctctgcttc atttcacaga gtacttgagg 28800 tgtttctata gataagttga taggttggag ggactggaag ttgggacatc cccacggagg 28860 gggctccact tcccccatgg agcaggaggc aaggtccccc actgagagga agcaggggtg 28920 tctctgtggg gttacaggag ccaggcaaag gtttggaata gggaggaggc actgagcgac 28980 agageceage ttgeeeattt ataaagtetg etaggtggag etgaeegete agetgtggee 29040 cagccageet geacaatgtg gagteatete cagetgettg ggeeceagge aagaateaca 29100 ggaggaggag cctgtgccgc ttacttgtcc tggttttaaa taagtcactt ccccactccc 29160 agccacagtt tecteatetg ceaatgggga gaaacaagte aaatetggag atttgateet 29220 attgtgagga tcaaatcaaa taacacacat gaagcaccta gcacagtgcg tggcactcgg 29280 aagttgctca atgttccttc ttctgctcct ctgccttcaa gtgggcttga gcaaatgtaa 29340 cctggatagg aagggacgtg gatgttgtat cttgtattgg tggatgctgt tacatgcaac 29400 aattttaaat acageegaet eteattaett tetgtageee ttaaaaaage tatggeatea 29460 ggctcctgtg agtctctggc cacattttta gcaaccagtc aacatacaac attgttttat 29520 ttatttattt atttagacat ggagtttege tetattgece aggetgeagt geagtggtge 29580 aatctcagct cactgcaacc tccacttcct gggttcaggt gattctcgtg cctcaacctc 29640 acaagtaget ggaattacaa geaceegeea eeaegeeeag etaatttttg ttttttagta 29700 gagatggggg tttcaccatg ttggccaggc tggtctcaaa ctcctgaccg caggtgatcc 29760 tectgeetta geeteecaaa atgetgggat tacaggagtg ageeactgga eecageeaca 29820 actttgtttt atgtgtgttt ctgcttagag accettattt aatatataaa ttgttgatte 29880 actagcactg aactcacagc caacactact gtaactcatg tctgaacaaa gcttatcaag 29940 cacacgtatt ttctccttaa ggcacatcac agccttcttg tgcttgagaa caccagagag 30000 cacttcagca caatgcttgg ggccatttta aatagcaaaa tcaccaacaa aaaggcacaa 30060 aaaatgagaa cggttcgcaa caaataagtc acaaaaagaa tacttgttta cactatgaca 30120 gctgagacaa gaaggcaggg tgtccctttg ttcaccttca gctgggaaca tatgtgtggg 30180 taagtcaaga ttttcaccac tgtacataag tatgtccaca aataatagca attgtgcctc 30240 aagtattgat ttgaaggtta caaataaatt ttagaagtag gtgattttgc aaatatggaa 30300 tccataaata atgaggatca attttcttta ttttttctga ttacaaaaat atatataata 30360 aacagagcta tctaatgtaa aagttaaagt cccccataat cccagcccac aaatgaacac 30420 aattagaata tagttetata gaatttttgt tatgeaaata atgeetgtga ttgtgtetaa 30480 qtctqtqqqt qtctatgtqt cagtqtattt gggtctttct tttctttttc tcactcaaca 30540 atagetettg gatagettte cagaaaaaaa aaatteetga tgttaattte tggagtatga 30600 atggaagcag atggcataca ctgcagtcag gatctctaag tcttagttca gaccactcaa 30660 ccacatcaga tgtggagaga gcaatgactt gccaaatgta aagataatca acagttttag 30720 tgttctgcat cttaatggag atggaataag gtcaagagaa gaactgctca gaggataaaa 30780 ggactgaaca ctgggaagta aagtgaaaga gaagagactg ggtcgggcac ggtggctcac 30840 acctataatc ccagcactct gggaggccaa ggcaggcaga tcacttgagg tcaggagttt 30900 gagaccagcc tggccaacat ggtgaaaccc cctctctact aaaaatacaa aaattagctt 30960 ggcgtggtgg cgggcacctg taatcccagc tactcgggag gctgaagcac aagaattgct 31020 tgaggctggg aggtggaggt tgcagtgagc caagattgca ccacttcact ccagcctggg 31080 caacagagca agactccatt tcaaaagaaa aaaaaaagag tctgtgactt tcagccagag 31140 aaaaccacat tetgtgteet ttggaggaga ttagaeetae atattaagae tatttaetga 31200 aaggatttag acaatagagt aaaatagtac cagagccttt tctaaaaaca gctgcaaaat 31260 tggctgggcg cagtggctca tgcctgtatt cccagcactt tgggaggcag aggcggttgg 31320 atgacctgag gtcaggagtt tgagaccagc ctgaccaata tggtgaaacc ctgtctttac 31380 taaaaataca aaaattagcc aggcatggtg gtatgcgcct gtagtcccag ctactaggga 31440 ggctgagata ggagaatcac ttggacctgg gaggcagagg ttgcagtgag ccaagatcat 31500 gccactgtgc tccagccagg gtgacagagc gagactccat ctcaaataaa taaataataa 31560 aaacagctgc aaaatagtat ggagaaagct gggctgctgc aacaaaagac ccaaaataca 31620 atggetttta gaaaataagt ttaettetea etetgtagte eatgteaggg tggetgtaet 31680 tcatgcagtc attcaggaac ccaggatcct cccatatctt tgctccatca gcccttttga 31740 agcattattq aagctgtgtc cctggtacat ctatgttcca actcaagaga agagaaaatg 31800 gagcatggga gagcaaaagc ttcatgcctt aaggtctatt tctatttatg ttctattaga 31860 aagattttag teaceaagte teactegget geaagaacag etgggatgta tgatetetag 31920 tggaccagcc attcctccga ctgctactct actacataga agaacaggag gatgaagttt 31980 agtggacage tagcaattte cateacatet cetttatttg ageettggta tetteeteta 32040 taaaacgggg ataataatat aaactagtta aggctgcttt gggactgaaa tccaataata 32100 tatgtgagaa tgcttagcaa gccctactgt gcctgataag aatttctcat tgattttgcc 32160 ctctagactg ccagctcctt gggagcaagg agcatagttt attccacctc ctcacaaaga 32220 cctgcttgga gtcagcatca gtaaatacat gttgaataat gaagtcactg tttcatccat 32280 catcaagcct ttttttttt ttcatttcat ttcaaatgct tcaataattt agactctgcc 32340 ctgttcactt tccccacccc ctcattaggg gtgcacgtca gtatatcagt tgggattctc 32400 tgggttgcaa agtgacaatg cactactgtt aaactggctt atgcaataag atggaccatc 32460 tcacatatcc tgaagtccag actctgcatc agaataaaag cttcttttcc ctaggactct 32520 cttggccttg ccctcccttc tgtatttgct gcatcctcag actgggagca agatggctgt 32580 tgcaattcca agcattgcca ccaaacatat cccagcaaag ggggcagact gttttgcaaa 32640 gtaaagagac cattteetga aaacceetet etgecatagg etteecettt agttttteag 32700 ggtggacctg cccaaaccgt cactggcaag aggaatgaga ccaccataat ggacttggac 32760 caaacaagac tcactccatg agaccaccat aatggacttg gaccaaacaa gactcactcc 32820 tggaaatggg ctggggtcag ccttccttgg gtcacttggg gaagggggcc acctgaccaa 32880 aatcagggct ctgcccataa gaaaatgttg agaaactgct gttgcatgag caaccaaatt 32940 atttttctcg caatgatgga gattctgggc cagatgaggg tgtgatggag aaagtgttaa 33000 ccatagagaa ctaaactgag agctttttca taaactgtac ctcaataaag tttaacacca 33060



aaggtgtatg aggggttaag actgagatca ggtccagata ctctacaaca agtttagatt 36000 taagccagag tagaggccag gttgagtggg gccaggactt aaaggtaaag atttggagaa 36060 taaggcccag atgtaaggtg attcaagaag ggaggggcta gacctctagg agtctctaga 36120 ggtttttgat gacctccttg gctctgtccc ccacatcagg acttttgaag aataagtgaa 36180 acggtacatg cagagtgacc tgagcatagt tggcatagaa ctctaatcgg tctcccttaa 36240 gacttcctgt cttcactgac aaactcctac tcaaatttta aggccttgct caaatatcct 36300 ttccgtgaag ccttctccaa gttccactgg tcaaacaaac aaacaaacaa acaaaaacat 36360 tagaactgca tttccccaaa tgctctctat taataagtgt gggaaatata gtatattttt 36420 tatacccacc cccttggaga attttcagtg tgcatttgca tattaaaagc ttagagaaat 36480 tttgttgcaa ataaatctat tttactgtgt ttaataaaat ggttcccaag cttacttggg 36540 cctggaatcc ttttttcaag ctaaatcact taaatccagc agccccatgt acctggcttt 36600 gggatactag tcgagcacgt agttctccaa ggccagagac agaatcttat ttttcctatt 36660 tatggcccca aagcctggtg caaggcctgg cccacagtac acaccaataa aggccaaatg 36720 aatgaacgaa agaatgacca accetggeet aagetggaee acaetgtgga gegtttggaa 36780 gcagaaggtt tttggctcaa acattttatg aaaatggagt gggctaactt gggaggtaat 36840 gagetttetg geetegagat acteaaacag aaactaaata attaetttee eetgtattgt 36900 agggggtccc aacccctcca cacaatagtt tttgagtagg cctgcaccca gcagatgccc 36960 atgggcctca ggagaaatgg cccatgttca ccatcgctcc ttccctgtcc cttttatctc 37020 aaaactacaa ctgactccct tccagtctag ctgtctgagg atgaaggccc catcagaggg 37080 tgagcaaggg cctgggcctt tgggagcctg cacaagggtt ggccctccac ccccagagcc 37140 ategtgetag gegetgetge tgtecatete eeegtetatg gagteacata ageaggaaga 37200 gtttgagggg actctgtctg aaaccatctg tccaacctct tcatcatgta ggaatggaaa 37260 gtgaggcctg gagaagttat gtgacttgcc caaggccaca attccagaca gtgagagagc 37320 cagggetata gggeaeagee tgaeecagat ecetettete tgatetetee eeteettgte 37380 tgaccttcta gcctctgctt cagagccttg gttctcctgt ctgcaaacca ggaaatccaa 37440 attactgtat gttgggcttc tgtactctat cccatgacct gggggacaca ggagaaattg 37500 aacatgtatt acctacaaat attattgaaa tgcttcatta ttgggtgaaa agtaaaacag 37560 gactgccact tgcttactct ctagtgcact gtcgtggggt tggacatact tgggttccaa 37620 acctgctgtg ggcactgtgt gcaccttggt gagtcacttc atgtaaacgc tgatgctctg 37680 tetgtacaat ggggteagga tgetteette etaceaggae ttttgtgaag etgacetggg 37740 attaacctgc tatttgaggt tcaaaggcac acagtacggg ctggaataac atacagccca 37800 cettttetet ttetgeetgt gagageteat gtgeecaget gagtgaatge ecagaetete 37860 ctctctggcc cgagaaggag gccttgcttt agtgtgtcct ttgggcttgg caatttggtg 37920 gcagagaaat ctgcctccca tctagagagg atgtgctgct gggtgagatt caaggcaccc 37980 tecaececae etgeetetee etceatatgg ggaaggeaag gettattage tatttatgea 38040 gcagaaataa ggctgaaccc cccctctctt ccctttttct cccagcagct gatggagctg 38100 gggcccttct gcagaattac agactcagag ccatgcagat gatctggtgc cacatccact 38160 tgacagatgg ggaaacagga gagggagagg gaggaaggga acttgcctaa ggcctcgaag 38220 ccagaggaag ctgggcctat actcagctgg agtctcccaa caccctacct agcagttggg 38280 gtgcagcttt tacatttatt ataaatcctt gaggcatcag agcagagaaa ttaagagccc 38340 tgctttgtac ccaggtaatc tcaatcctgg ctctaccatt tactgtgtga ctttgggaag 38400 attatttacc atctctgagc cttgggtcct tcatggacag catggaagta attatattag 38460 gattaaacaa gatgatgttt ataaaaactt agtactgcac ttggcaccta acagcactca 38520 ataaatgaca gctatagtag gttacatcgt actcggcatt attgacattt ggggctagat 38580 aaccgttgtg cagggccatc ttgtgtgtta taggaagtct ggtagcattc ctggcctcta 38640 cccattagat gccagtagca aactccaccc acccgcaag ttgtgacaat caaaaccatc 38700 tccaagcatt gacaaatgtc tcctagagtc aaaatcacct ctagttgaga aacctgacct 38760 agaaaagtcc cactgaactt taaaacttca ggtcaaatat cacctcctct gtgaagcctt 38820 ccctgaccta ctaagcacaa ttgctttgta ctccagatta catcacaggg gtcagatcct 38880 gacatgctgt gtgtccttgg tcacgtcact ttgcttctct aaggctcctt ctctaaggtt 38940 catctataac aagaggatat gatgttcctg ggaaggatgt tgtaagggtt agggatcctt 39000 tatcagaagt gcctagtact gtgcctggca tagtaggcac cccaaaacta tttttaaatg 39060 tctttattct gattataaaa ttaacataag aagcagagct gtataatgta aaagttaaag 39120 tcccccata ataatacccc atgaaacatg gcaggagtta ctatacagtt ctaaggattt 39180 ttatgtaacc tgtgggtgtg catgtgcatg tgtgtgcatg cgtacatgca tgtgtgtgtg 39240 catgtgtgtg catgtgtgca tgcatgtgtg tgcatgtgtg tgtgtgtgca tgtgtgtgtg 39300 tgcatgtgta tgtgtgttgg tgttttcctc cccacctcca ctgctgagta cctggaccac 39360 tgagcaaagt ggagggaagg agcccatttc caaagagttc agggcttctc agccaatatt 39420 catcgagccc agtctgaatg cctgggactg cactaagggc ttttcttgca ttacctcatt 39480 taattttcat agcaccctgt gggatgggta ttgttatcta tttcttctac tgatgaagaa 39540 acagactcag aggaattaag tgactcattt ggtcacccag ctggtaaatg gcagggccag 39600 gattggaagc cagtctgact aggccacata tcgtccctga gctacctctg agggctgggt 39660 aattgtetee cagecaceet geetgteetg tattgacagg getaggeeat etgtgeeage 39720 tgacgccccg agggcaggtg gttgggacgt catcttggtc agagcagacg tggcatccgg 39780 ctctctggcc atctcaggtt cctaaccccc agagagggga tccgattcag tttcagccgc 39840 cccctccagg cctcatgtga ccattggagc ccttcccaag gcttccttca tgccagagaa 39900 gacagcagtg gatcagcctt ggacgcaagc cctggtaggc agggtatggt gatccagtga 39960 caccaaggca gccacccaag gagggagggg ggtgggggct aggttcaaat ctcggctctg 40020 gtttttttcc aggagagggg gtgacacctt cttacccaat ttgagaaatg gaagtaagaa 40080 ctagccctcc tgctttctgt ataaagagag agaaagagtt gctaaatatc caaagaaatg 40140 agagattcag aggcacttta ttttgtagca tggacaggaa ggcagctggg ttgtctgtgt 40200 tgtggggaag tggctctgct gttacttttc caaggagagg gcaggatttc tatgccaaca 40260 gcagcctctg tgagggcaaa gctggctgtg ggtcaaactc agagctggcc gctggcatct 40320 ccacatccct cttcacaggt gtctgggcag ccaggatacc tttgctgagc acgggccaca 40380 gtgtagaagc ttagggccaa cattggggac cccaatatgt ttattttata gaaagaaaaa 40440 agacctggta gggactaaca atgatgaaac aatgactcta taaaattata gcccaagttt 40500 tggaggcaca aagtaagtta tggggcactt actgtgtgcc aggtgctgtg ttataggcat 40560 ttgattctca caaggatttt ttcgttccct actccctgag tgggactgag atcagtacca 40620 tctcacagat gaagaaaatg aggctgagag attcagtaac cttcccaaga tcacactgca 40680 agtaggaaga aaagctgaga ttcaaagtgg tctttctgac tcagaattca ccctccttcc 40740 caacacgcca actgtcccag ggagcaccaa atggggagga acctgagaaa ccatctggtt 40800 gacacgetee ceattitigea gatggggaaa etgeettigee eagggttaga eeagagetea 40860 gctctcccga ctcagtccag tgttgttttc ccagtaccat ttaccttcct gacctccatc 40920 tctgcttgaa cactcagagg gatgaggcag atttggaggt gagttctgtc ttggattcag 40980 ggattccttt aataatttct gggctgggcg cagtggccca cgcctgtaat cccagcactt 41040 caggaggcca aggcaggcgg atcacctgag tttgagatca gcctggccaa cattatgaaa 41100 cccccatctc tactaaaaat acaaaaaaaa aaaaaattag ctgggcattt gtggcacaca 41160 cctataatcc cagctactcg ggaggctgag gcacgagaat cgcttgaacc gggaggcaga 41220 ggttgcagtg agctgagatt gttccactac tctccagcct gggtgacaga gtgagactcc 41280 atcttaaaaa aaatacatat acatatacat atacatatac atatacatat acatatacat 41340 ataaatacat gtgtgtgtgc atatatatgt atatgtgtgt atatatatat atatacacac 41400 atatatgtat gtgtgtgtgt gtatatatat atatatacac acacacataa tttctttagc 41460 cagtatetgt gecatggeta cagagggeca gecetgtgtt gggeecagga aaaaactaca 41520 caagacctgg ccctgtgtgg tcccgaaaga taggcccata aactggtagg ttgctgtaac 41580 tgaggcttgc tctgttgagc tgaatcctaa aagatacgct gagtacttca ggccagggag 41640 caaaaagaaa gatgttatgg acagagggaa caaaaacatg cacagcctgg tgcaaattgt 41700



tttggaaacc aaggtggagg gagggtgctg tgagcacagc caggtgttgt cagctgttct 44640 ggateetage aggeeeteea tgtttateet gttettettt gtattttaee tatteaagtt 44700 tetteeteat egactaactg caaattttte aaggaceatg tataggeeca eeeetggage 44760 ggccagcaca aagcctgaca ctcattgggt actcagaaat ttttgctgca ttgatttgca 44820 tgggaggtag ggaggccaag agattttgaa catggatttt cggagccact gagagcctcc 44880 cctctgcctc ttactagctg tgtgaactta ggcaagctgc ctaacctcac tgagcctcaa 44940 tttccccctc tgtgagatgg acgcaataaa gacactacta accttgtgga ttgttgtgag 45000 aattaggtga caagatgeet gtgaaattea aacceaaace acateegeet ceageeeete 45060 tggtcctggg tctctgccgt taccagtgtc cttcctcagg gttaagctgt atcacttgag 45120 agtttatcag gctccagttt cctgtgtgac ctctctgctg gagtaaaatt tctagtttgt 45180 tetectgtgt caagetgtgt ggeegtggge cagteagtee ettecettgg geetgtgttt 45240 cctgtcctgg caatccaagg ggttggacca gatggtccct gcagtctctt cctgctctgg 45300 ccatctgaga agggaaggag gggccacctg gacacagtga gggatgaaga cacaaagaag 45360 cgactaggga gccgcatacg ggacacagtg accgctctgt ctcccgagca cccagggtgt 45420 gccaggetet gtgccctgtg aggetgaaca ettettacea ttgteteaet ttateeteee 45480 aaccctagga gatatgatta tccccatttt tcagacaagg cactggggca cagagaggtt 45540 aggtgacatc ctagggtcac acagcccaat gggtggtaga gccagtcttc taaccaagga 45600 aggagacacg ttggagcggg aggggtgaca cagctcaggc agccttctaa gtcctacctt 45660 ctggactcta gggtttggtt ttcctaattt agctgtttct ttgggctctg cacctagccc 45720 atccaaggaa ctctgcctgc tgggggcctt ctctcccctc ccaccctttc gaggtgaact 45780 ctgactcacc ctaccctcat ccttgggcag ggacatcctg aaaactcacc gaggccaggg 45840 gtgtgtggcc gtgtcctagg tactgaaatt gtgaaaatct cccctttcca cagtccttgc 45900 cctcaaaagc ccataatcta gtgggggaga tttttgttgt tgttgtttta aagatggggt 45960 ctcgctctgt cacccaggct ggaatgtaca atctagtagg ggagattttt tttttttaa 46020 agagactggg ctgtgtcacc caggctggag tgcagtggca cgatcttggc tcactgcaac 46080 ctcctgggtt aaagcgattc ttgctcctca gcctcccaag tagctggaat tacaggcatc 46140 caccaccatg cccggctaat ttttgtattt ttagtagaga cggggttttg ccatgttggc 46200 caggctggtt ttgaacttct gaccttaggt gatccaaagg tctcagcctc agcctcccaa 46260 agggttggga ttacaggtgt gagccactgt gcccggccta gtaggggaga ttgacaggta 46320 accttgcaat taaaatgcag tgtgtgccat cagggtacaa gtgtgggaca ctgtgcatgc 46380 agagtttgag acatgtactc ccaggggagg tgacatttga tctgggtctt gagagatgtg 46440 taaaggcctg gagagccctg cgagctgctc agtgtgtctg cagcagtact gtccactaga 46500 actetetggt agaaegggea gttetgtgte tgeaetgtet gataeageag eecaggtgge 46560 tggcaagcac ttgaaatgtg gccagtgcaa ccgaggagct gaattttcca ttttatttca 46620 ttttaattaa ttgcaattta aatagccacg tgtgtcgtat tgaacagcac acgtctggac 46680 caagagctag gactggagaa gaaaaggttg gggccagcag tagagccttg aatgtcaccc 46740 taaggetttg tgeetttett eeeagacaat gtggaaatet geagaetgge acaatgggga 46800 gagtgagagg gggaagcatt tatacatctg ccctttagaa caatcactgc agctgctgtg 46860 cagggcactt ggagcagcag gagagctaga ggcagggagg agcctggggc cacagcccag 46920 agagcaaacc tagtgactgg attggtttgg aggcggtagg aatcaaggat gactctcact 47040 ccgaggtttc tggctgggat ggagttaggg gaggggtgcc cttcactgag atggggaata 47100 tggggagagg agcaagtttg ggatctccta acacgatcgc agcattcccc atgatgtaag 47160 tgtctgtgtc cctgactgtc accccaacac atgcacacct catggcatca cgtttaggac 47220 tcacacctca tctctcccca tccttgacac agcaccatgt ggggcccaag gtctcaacac 47280 atgtttgtgg aatgggcaaa tgagtgttct gattctcccg gatccaggag gaaggagcaa 47340 gcccgctgtc cttattccct gactgcaaaa tcagggagga aatgtccagg tttctcaagt 47400 gccctgagca atgtgaggaa ggcagactcc aaggcagttt ctcagaaatc ctgaagagct 47460

```
qcctqqqtqq ctqqgttttt tqtqqaccca tgggggccac cagggggaga attgtagcac 47520
ttqqcccatc tcctcaacat ctqcctctca gccacactgt gtcccaggct ggatagccca 47580
aggetgteag aggeacetga ggageggtet ttttaetete ttaggeaaae aagatteete 47640
tgctccgagg actgtatccg ctcaagctgc acacgaatgt taggaatgac tttcagctgt 47700
tagtaacaga gecetggetg aagtagetge agteagatgg ggtgegttte teteteatgt 47760
aaqacaaqte tetaggaaag gacteeaggt gggtgtgetg eggeaggttg caetggetee 47820
tqaqaqctqa ttqtqtqcat ctcatcccaa tqccaaqtcc aaqtactact tcacactgat 47880
agcttgaaat ccacttgagt gggaacattt acaccatgga aattggcact gttggggatt 47940
taaaaaaaaa aagttttttt cagacagcca gcttcctagc atgtcactga gtaaaccgat 48000
qqtqtqqcaq ccccacaqtc atcagggact cgggctcctt cttccttcta ctcttctggt 48060
ttcagcttqt qactttqqtc tttacagttq cctcatgqcc tgagatqqct qccagagttc 48120
caacaattgc atcagcatgg gctctcaaaa caagcagctt gtatttttgt attttacccc 48180
cattttcatq qcqqqqtcct cctcatcctt ctqctqtcac ctcctcagaq aagccttccc 48240
tggccaccct acctaaagtc ccctccatct cacactggtt tattttcttt gcaggacaca 48300
ccatattggt aacctcgctc ctttattatt ttccttgttt gttgtctgtt ttccccacca 48360
qactagtccc tatgatcagg gacggtgtct gtcttgtcct tcgccataat cccagtgcct 48420
caacagtgcc tggtacataa tagttgccca agaaatgttt tttaaatgaa taattgatag 48480
taatcaaaga taattttgtt tootgoatto ttocatoago atgtoatoat gaatatttto 48540
ccatgttgct gcctagtctg taaaattaat tgaactagac atttaccaag gccctccctg 48600
qtctqacaaq ctqaatqaqt qqqaqqqaqq tqqatqtqaa caqqtaaqtc agccttcctg 48660
qcactqctca caqcccagac tqacttqqqq aattcagaqq ccatttccaq gaacttcatt 48720
cacgcagcaa gcgtcattga gtcccatctc agtgccaggc tgttgctggg tgtgaggtat 48780
atggagaggg agcagtagga gccaccctgg aggacttgtg ggccaatacg gggacgaaga 48840
agagacagac aggagaacaa ctggcgataa tacaatgggg tagattccca atgcctgcag 48900
acagetggae cetgtgetag ggageaetea cetecacaae ceatttatea ettgaeaaat 48960
aatcactgag teeetgggea taaggeaggg aacaageeag acaagattee tactactete 49020
atgaaactca cattctagtg aggagataag caataaacac acagtcaaat atattcagac 49080
agcagaaggc gcaaggaaga ccgtgaatcc agatgtgtga cagggtatga ggaggtgcca 49140
ctgtgcgtgg ggcggtcagg caagactctt caaggaggtg gcatctgagt taaattaatg 49200
gtacaaagga gtcaccgtga gaaactttga gagtggaggc caccagccag agggaatagc 49260
cagggcatag tctgaagatt ggaacgagct caagatggtg gaggcacagg aagaaggcca 49320
ctggctggat gggagtgatg ggggagggtg ttggagacag aggtgggatc agagggtgcc 49380
ccaaactcag caatcaagat gaatagtatt taatgccata tttcttaaat caaaattaat 49440
qcaaaaaacc cacgatgaac aaaattcaac atttcaaaca aggccaggat cactaacaat 49500
qttttqttqa qccacactqq aacctqaqac aaaggaaaaa tcagtqagqc tgattqtgtt 49560
tttatttaaa attttgatat ettgtgtgtt gtggatttgt tgttatteat egeaggagte 49620
atcatggtag aaaacgtgtc acctggcatc aagatcatgg tctccacaac caggctgtcc 49680
qqqttccaat tccttcttta ccattatatq tttatctqta tqctatqqqq ccaqtttctt 49740
                                                                  49744
gacc
```

```
<210> 5
```

<211> 30625

<212> DNA

<213> Human

<220>

<221> modified base

 $\langle 222 \rangle$ (4754)..(30625) $\langle 223 \rangle$ n = A or C or G or T/U

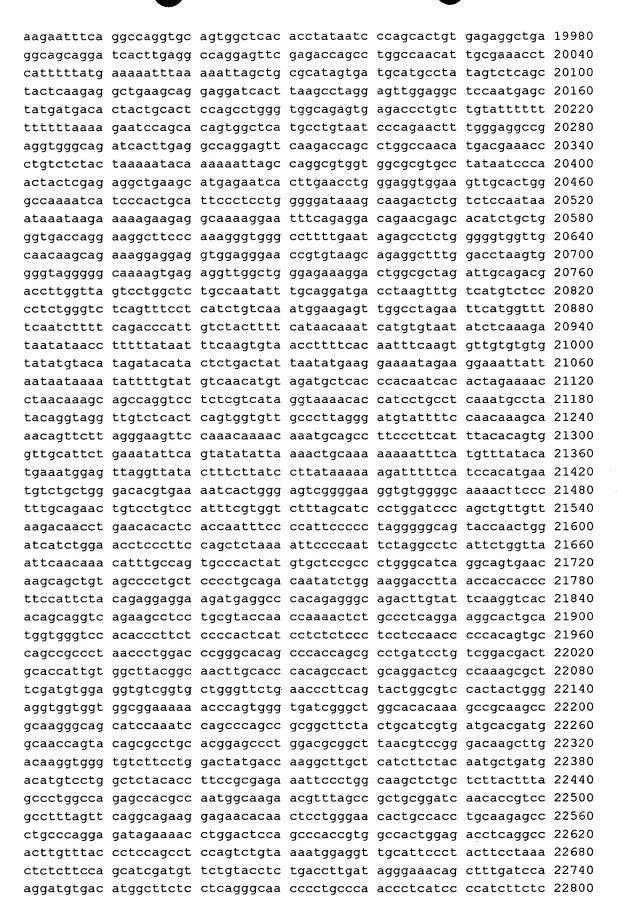
<400> 5

tctctgtatc tttttctcca tcagaagatg gagataataa ttgtgcctcc cttagggtta 60 ctgagaggcc caaatgattt aatataagca aagagctaag aactgtgccc agcccactgt 120 agccctcgga gaatgttggc agctagtctg tagcattgga ctggtacagc tttggttcct 180 tagagcagtg gtccccaacc tttttagcac cagggaccag cttcatggaa gacaattttt 240 ccacaaaccg cagggggtgg gggtggggtg atggtttcag gatgattcaa gcacattaca 300 tttattgtgc actttatttc tattattatt tcattgtaat atataatgga gtatttacac 360 aactcaacat gatgtaggat cagtgggagc cctgagcttg tttttccgca gctagacagt 420 cccatctggg ggtgacggaa gacagtgagt gatcatcagg cattagattc tcataaggag 480 caggcaacct agatecetee catgtgeagt teacacteet gtgagaatet aatgeeacea 540 ctgatccaac aggaggtgga gtcaggtggt aatgccagcg atgaggagcg gctgcaaata 600 cagatggttt gcccctcccc accactgttc atctcctgct gtgcgtccag gttcctaaca 660 agctatggac caatacccac ctgtggcctg ggggttggag acccctgcct taattctaag 720 cggggatcca gggccaagtg tggggagcca gagagtgtgt atgtggaagt cgattgtcac 780 agaagcctct agggtggcca aagaggagga ggttgttgca aagatgcagg tgaaagatac 840 ggacgggttc tggaggtgtt taggagacag actctacagg acttgctggt ggttgaactg 900 tgacgggagg caagtgttgg aggttgggga caaagaccag gctaaccccc agcgcctggc 960 agtggtcagg gctgaatgcc tgggccaggc atggcccctg cccccatccc ggccctgtgt 1020 gtgtttcaga gggagctgaa ggaccaactt caggcccttc aagacagcga gcgggaacac 1080 accgaagege tgeagetget caagegacaa etggeggaaa eeaaggtgag eetggeeggg 1140 gcgcggaagt ggggccggca aatatgatgg cagggcttcg aggggcgggg ccagctgggg 1200 aagaagggcg gggcctcggg tgtgcggtgg aaacctggct tcaaggagcc aaacctggat 1260 tgagaagggc agggtgggga agagggtagg gcatccgtga agttcaatgg ggcggcaccc 1320 accecateat gaetggegge aaggatgtgg getggteeet eggttaagga eggggeeatt 1380 tetecettee caetttgggt ggaagttgag gegggteeeg ggaeeeteeg gaaaceeeet 1440 qcctcctgaa gggctgggga atgtgctcag tctctttctc ctctcccctt attaaaaccg 1500 cccaaccetg gtgttgtgac acacacttgt agtcccagtc tettcagagg ccgaggcaag 1560 atgatggctt gagcccagga gtttgagacc agcctggcca atataacgag atgccttctc 1620 tacaaaaaaa aaaaaaaat tgaatatagc caggcgtagt ggcacatgcc tgtagtccca 1680 gctactctgg agactgagac agatgggaag attgcctgag cccaggagtt tgaggctgca 1740 gtaggccatg atcatgccac tgcactccag cctgggtgac agagtgatac cctgtctcta 1800 aaatgaatga atgaatgaat gaatgaataa gcccattgcc taggagtcaa tcctgagcat 1860 gtcccctcga agccctccag aggtggccca gccctggtat catctcccct taagctcagg 1920 ccatgggata cagactetga aaggtaggge caaactetge agtetetgge taccgtggtt 1980 tgggaaacaa acaaacaaac aaacaaacag acttttccac tgacttgaga aggacatggg 2040 ttctgatccc accactaact cactgtgtga ctttgggtaa attgcatgct ttcctgggtc 2100 cccaccette ccatetytee agtggggact gccaggetea gtecageact etgggactgg 2160 aaggtgccgg gtggagtccc cactatacaa agtgactctg tgtcgtgagg cctggggtga 2220 tttcaggctg accccgctct gtcagcagga gctgcggcag agccttagga atgcgctggg 2280 cctctggagg tcatcctggg gcctgaaaac accattggaa acccagatct atgccccagc 2340 ttggccacca acccactgtg gggtctcagg aaaggtcatg acaaacaatt cttcacaaaa 2400 cattccaaag tgcctctggg caggaccctc gggggcaaca gatgataaac agtcacagga 2460 tgctggcctc attgcttctt gcagcctcag tttccccaac tgtctggtga ttctgtacct 2520 cttggatgat gagaagcaaa tggaagcctc tctctgtatg agagcggagt attatgggct 2580 gttccttctc cccagcagca ctctcttctc tccacatccc acaccctctt tgtttttctc 2640 cagtgacete tteeteece gettteetgt ceatetgtet geetetgggg ggteetgtgg 2700 ggccacatcc ccctcgagtt cccccagccc cacttcctgt ttggactggg gtgtttatac 2760 aagaaatgcc tatggatgct ttggaggtca tatttcacct ggtgcctgac tcggctttcc 2820 tgctgcgcct gcccctccaa tggcctggcc tgagggcctg tctgatctcc ctcctcaggc 2880 cctctgtttt ccttggtcgg cgccctggcg gggtgatgca ttcttggcag ggtgtttttc 2940 tgaaagggcc ccagcgcctc caggccctag ggtgttccaa gggatgtgggt gggttggggt 3000 gggggctgtt tccccagcca cagagctgaa aggaggggt tggggaaagg gtgaatttgc 3060 cctggaaaga actagaataa atggggtgca ccagttgagc agaacttttc tctgtgctga 3120 gaattgtgtt ccttttcatt atcctgccaa cctcacagaa tgtcacctcc acgagagcag 3180 gattccctaa aacctagcac agtgtttggc acacaataag tagttataaa aaaagtgatt 3240 gaaaggaaaa aaaaatcggc caggcacagt ggctcacgcc tgtaatccta gcactttggg 3300 aggetgagge gggeggatea cetgaggtea ggagtteaag accageetgg ceaatatggt 3360 gaaaccccgt ctttactaaa aatacaaaaa ctagctgggc atggtggtgg gtgcctgtaa 3420 tcccagctac tcaagaggct gaggcaggag aattgcttga acccaggagg tggaggttgt 3480 agtgagccaa tatcgagcca ctgcacccca gcctgggcaa caagagtgag actccatctc 3540 caggtaggaa ctgttgttat ctcaatctta tcagtgaggc aactgaggca cagagaggtt 3660 gagggaccaa cctgaagtcc cacagctaga aaatggcaac ttgggagctt accatccagt 3720 cctgtcagag cccagtgcat agtgcagctg ggatgtctcc tggggtgtcc tgcaagagct 3780 atggctttgt agtcagcaag ccaggtaggt cagtaggact catcgggaat gtacttgggg 3840 ctccaggggt ggctgccact ctgatgttcc actgctggct gccctgtccc tgccttcccc 3900 cetttecete ceateettt tigteetiga gacattgaaa eeceageetg gaaagaaget 3960 ggagcctgca cccagctcta cggagcaatt tcagacaaga cttttccctc cttcacccct 4020 caagcaactc ctgattgcca gccttgtacc aggctctggg atgggcacag gggtgcagag 4080 ccgagggaga tgtcattcct acccagcagg ggcccactta ctagccaggg agacagaaaa 4140 tgtgggacaa tgtattaaga ctgttgacaa aaggctctgg gaacatccaa gtgcctgaaa 4200 gagaggaaag ttatctctga agaggtcact ttcaagctag gtcttgcagg atgagtagga 4260 gtttgccagt tgaatacagg gtttgggtag ggtcattcta ggcaggtgga gttgcaatgc 4320 agtggcgcta gggaggtaag ctagggttaa attgagaagg tccttgaatg ccagactaaa 4380 gagttcagca ttttactacg tgtcaaggag ctaaagaagg ttcctaaact caggatcatc 4440 tqtqattcag ttqqcacatt agaaggatca ctctqacagt gagtttgctg gcaaagacaa 4500 gagttgactt gtagaccaag tgagttggaa agacctgtgg gaccccagag ggatgtgttg 4560 gggagactgt tggaaaaatg ggtgtggcac tcaggagaca ggcaaggcca tctatatgga 4620 cttgggaacc atccttaaag cagttcaagt tgaaaatggg ggcaggtgtt cagggtgagg 4680 atggaaggcg ctgacctgga tgagccccga ggaacatggg aggcagagag gcagcagtca 4740 catagatggg aggcnnnnnn nnnntcttcc ccccagttgg cttcaggtgg tatatttcta 4800 aggcggggat caaaactaaa ctattttaat tactttctgt gtaagaagta acataatcag 4860 atttctattc tggcagaggg tactctatac attaacattt aaacatctca acgtggcatt 4920 caatagctgt accatctatt cttgatcaaa agtacagaaa aatcaaaaca aaaccccaca 4980 atgaagacag accatttcaa taaggaacca actctaactt tgtgaagata cactggaatg 5040 gcctcacttc aaaaaaagaa gcaacattag taattaaagt tcagccccct cattttccaa 5100 gctagagaag taagactcag agagattaag taacttgcct aaggttaccc agcaagtaca 5160 tggtagcatt cgccttagtg gccttcacag ttcagccctg gcctgcacct tccagcaaga 5220 ttctccccca ctcagcagca ggctgcttct gtgctgcatg gattgttgca gtagtcaccc 5280 tetgaeaagt ttgeeactgg tggaetgetg tttetgtgae aetgeageet eteeteaaag 5340 gtttcaatat cagccttgga gggaggagcc ctcctcctct gtgtttctaa gttcctgcct 5400 tetteactet eecteaggae eaggggtggt agetgatttt aeceetttta gtaattgtaa 5460 tgaaccacct ttacagttaa ccattcttta tgttaaaatt tccctgttca aattactagt 5520

qtgacatttg tatcctgata cagtctcttc ctgaaactat gattggacat tatgccttct 5580 qactctatgc accatttcct tagcctttcc tattttatat ctttttgtct ctgtgctaca 5640 tttqqatact ttcttcaact ctatcttccc attctctcat tctctcttct gttgtctcta 5700 atatgctqct taccctqqcc ataatttcaa ttttcatatt tttcatttct agttctattt 5760 aatccttttt aaaatctgct acaacatatt tttatattca cttattcttt ggtcatattt 5820 tcaatttctt atttcttcaa acattgtaaa agaatgttag cacctgataa ttccaatata 5880 tgaagtaaac gcaggtciga tctgctacct attgcttttg cggttcttcc tcacgatgac 5940 ttgtttcttt gtatgttgtg atttttgact gtgagctcat gtactttgaa accttatcag 6000 tgagaagcct aaactgaaga ttcctcctcc agagagaatt tgtttgcttc tgctaaatga 6060 aattattttq aqqcttaaqq tttttcaaac catatttaat qtqaatttqg gccataagcc 6120 caaaagaagg ctggcttgtg gttacaaaat ctcaattttt ttctctcttc caatcactac 6180 caagatcaaa acagtgaagt tttcttgctg ccattctctg tagaatgggc ttttttctct 6240 agttgactct tacactaagg atgtacttct tttgggttct cagctctatg taagggcatc 6300 ctattggatt ctccatcttg actaggccct aggaacccac acagatatca aaactgaagg 6360 tcaatgctac catgattcag catacactcc aaaacaaaaa tccagtttca gaattaggtt 6420 qccatttaat acatatttgg ataatcactg ttttgtatgc ttgggacaca ctaataaaca 6480 aaatacacaa aggtccttgt cctcttgggg tttacagttt agcagggggg aggcaaacaa 6540 gtaaattata tagtatgtta gaaggtaata agcactacag aaaaaaaaa gaatagaaca 6600 cacaacacct aaggcacaat ccataaaaga aataattgat aaactggact ttattaaaat 6660 taaaaatttc tgcactgcaa aagacaatat tcaccaggcg tggtgactca cacctgtaat 6720 cccagcactt tgggaggtcg aggcaggcag atcacttgag gccaggagtt cgagaccagc 6780 ctggacaaca tggtgaaacc ccgtctctac taaaaataca aaaactagcc aggcttggta 6840 gtgcacacct gtaatcccag ccattcaaga ggctgcggca ggagaatcgc ttgagcctgg 6900 qaqqcqaaqq ttgcaqtgaq ccaagatctc accactgcac tccatccagc ctgggtgaca 6960 qaqcaaqact ctaacttaaa aaaaaaaaaa aagaaaaaga aaatgttaag agaagacaag 7020 ccacagactg ggagaaaata gttgcaaaag acacatctga taaaggactg ttatccaaaa 7080 tatatqaaqa actcttaaaa ctcaaaaatq agaaaacaaa caagtaaaac tctgtttaaa 7140 atggtcaaag gactttaaca gatacttcgc caaagaatat atacagatgg caaataaaca 7200 tatqtcatca gggaaatata aattaaaaca acaaatacca ctgaacactt actcaaatgg 7260 ccaaaattca gaacactggt aacaccaaat gctggtgtgg atgtggagca acaagaactc 7320 ccattcattg ctggtgggaa tgcaaaatgg tacagccgct ttgaaatacc gtttggcaat 7380 tttctacaaa actaaacata ttcttaccat atgatccagc aattgtactc cttagtattt 7440 acccaaagga gttaaaaatt gcttgtcaca caaaaactta cacatagatg tttataatag 7500 ctttattcat aattgccaaa acttggaagc aaccaagatg tccttcagta ggtgaatgga 7560 taaactgctg tatacccaga taatggaata ttattcagtg ctaaaaagaa atgagctatc 7620 aagccatgaa aggaatgaag gaaacttaag tgcatattac taagtgaaag aagtcaatct 7680 gggccacggt ggttcatgcc tgtaatccca gcactttggg aggccaaggt gggcgaatca 7740 cttqaqttca qqtqttcaag accagcttgg ccaacatggt gaaaccccat ctctactaaa 7800 aatacaaaaa ttatccgggc atagtggcgg ggtcctgtaa tcccagctac tagggaggct 7860 gaggetggag aategeetga acceaggagg tggaggttge aatgateega gattgtgeea 7920 tcacactcca gcctgggtga caggagcaaa actccatctc aaaaaactaa taataataaa 7980 aqcaaaaaaa ataaaqactt cactatgtcc ttgagagaac attttcaccc tgtcccctag 8040 ccctcactcc agctccctca tccctcctac ccccaagcca gaaacctggg cattatcccc 8100 ageteettte tettetgtae eeetetagee aacacageag ggteaaagag getgeeetet 8160 agatgtttct caaaccgtgt tcctcaccat tgctgctgct cctctagttc aggcctcatt 8220 ttctcacctg ggccatttca ttagctattt aatggaccac atagaacatg cccatccttt 8280 cctaccacca tgcttttgca tgtgacattt cccccaccac gcgtgccctt tcccaccctt 8340 tectetetqt qtqtcaagge tetegattte etecteteae ceagagatea ecceatetge 8400 tececeagee ataaceeetg aegactgtee eccacagtet tecaceaaga geetgeggae 8460 cactategge gaggeetteg ageggetgea eeggetgetg egtgaaegee agaaggeeat 8520 gctagaggag ctggaggcgg acacggcccg cacgctgacc gacatcgagc agaaagtcca 8580 gcgctacagc cagcagctgc gcaaggtcca ggagggagcc cagatcctgc aggagcggct 8640 ggctgaaacc gaccggcaca ccttcctggc tggggtggcc tcactgtccg agcggtaagt 8700 gccacccgcc ggggccctcc ccggctgacc atcccctcct caacccatgc tgggcagtgg 8760 gagtggaggc agatgggatc cttagcagag aattctttca ttcaaatttt catcaaacat 8820 ttacgggaca tctgctatgg gtaggagcat gaagccttga gtatgaaggc cagtgaggct 8880 tgaactagag gagcagcagc aatggtgagg aacacagttt gaaaaccatt tagagggcag 8940 ccactttgac cctgctgtct tggctctagg ggtgcaggag agaaaggatc tgggaataaa 9000 gacttcatat atttacatta ttatatatgt aatatattct gtatacatta tagatagtag 9060 ataatgttgg cattacgtgt tactatataa aggctttata ttactgtaac cctctcagtc 9180 cctttgaaag tagttaccac tgtcatcatc atttcatgca tgtagaaact gaggctcccg 9240 ctgggcacgg tggctcacac ctgtaatccc agcactttgg gaggccgagg caggtggatt 9300 acctgagtca ggagttcagg accagcctga ctaacatggt gaaaccccgt ctttactaaa 9360 aaaaaataca aaaattagcc gggcgtggtg gcaggcacct gtagtcccag ctattcagga 9420 ggctgaggca ggagaattgc ttgaacccag gaggcagagg ttgcagtgag ctgagatcgc 9480 gccattgcac ttcagcctgg gcaataagag cgaaactctg tctcaaaaaa aaaaagaaaa 9540 aaaagaaaaa aactgaggct ctgaaaaggt acatcagttg gccaaggccc cccatctggt 9600 aactggtaag ccaggattca agcctaggtc tctgtgaccc caaatcttcc cttagtagta 9660 ataacactta gtcattggtt tgttggtgat caatactgat tgctaagatc atgaatttgg 9720 cattgaccgt gaccgagcac tgtgctgagc atctgtatat gttatgccat gtaattctca 9780 caaaaagcct agaaggctga tgctagcata gcacccattt taaagatgag aagactgagg 9840 gaatggttag agaggccaga agcagcacaa gcaggcactt gaatctgagt cccacagact 9900 teteacteat gaccacatee tatgecaget geeetgaagg tggetgeggg geeeetggea 9960 ttggggcagg aatccagtcc ctggtgcagc cccctttcct gctctccttc caggctcaag 10020 ggaaaaatcc atgagaccaa cctcacatat gaagacttcc cgacctccaa gtacacaggc 10080 cccctgcagt acaccatctg gaagtccctg ttccaggaca tccacccagg taaggcatgg 10140 gttatcatgg tecagageta ggtggggeat gteceageae ageeeageee eetgteetaa 10200 acacagcatg gggcagttgg ggtgaatgag cagagtgcct tgctgagcac ctagtgtgtt 10260 ccaggacctg tcctgggcac ctgcacaatc actcagctca gtggaccttc ataacacccc 10320 aggagatggc tgggcgtggt ggctcacacc tgtaatccca gcactttggg aggctgaggt 10380 gggtggatca tgaggtcagg agttcgagac cagcctggtc aacatggtga aaccctgtct 10440 ctattaaaaa tacaaaaatt agctgggcat ggcggcgtgc acctgtaatc ccagctactc 10500 gagaggetga ggeaggagaa ttgettgaae eeaggaggea gaggttgeag tgagetgaga 10560 ctgagccact gcactccagc ctgggcaaca gagcaagact ccatctcgga aaaaaaggaa 10620 gaaaaaaaa aaacttgaga taggttccat tagcaaaccc attctccaaa tgaaatgact 10680 gaggeetgga caetteataa aeteetteta tacaacaggg tacataaaag tteacateag 10740 gaactgttct aggtgctgga aataccatag taagcaaaac aggcaaaaat ccctgccctc 10800 acgcatctta catcctaggg tgtgagatag aaagtagaca aaagtaaatc agaaaaatac 10860 agagcatatt agatactgac aaaaaataag gaagggggct gggaaaggtg agacaggatg 10920 gagattttag acaggtggtc caggaaccag cccgcactga gaaggaagca ttagagtcaa 10980 gggctgaaga agagtgagcc acgtaggtat ctggaggaag agtgctcctg gcatggggac 11040 agcaagtgca aaggacetga ggcaggagca cateteacte teaceagtet eeetetgttt 11100 cccaggcagg aagagcaagg aggttaacgt ggctggaggg agatgagtga gaaggagggt 11160 caaggtgaaa agactgagaa ggtagcagtg gccagacacc acgagggtct gtaggccatt 11220 gtgagaactt tggattttat gctgagtgag atgagagcca gtggagggct tggagccatg 11280

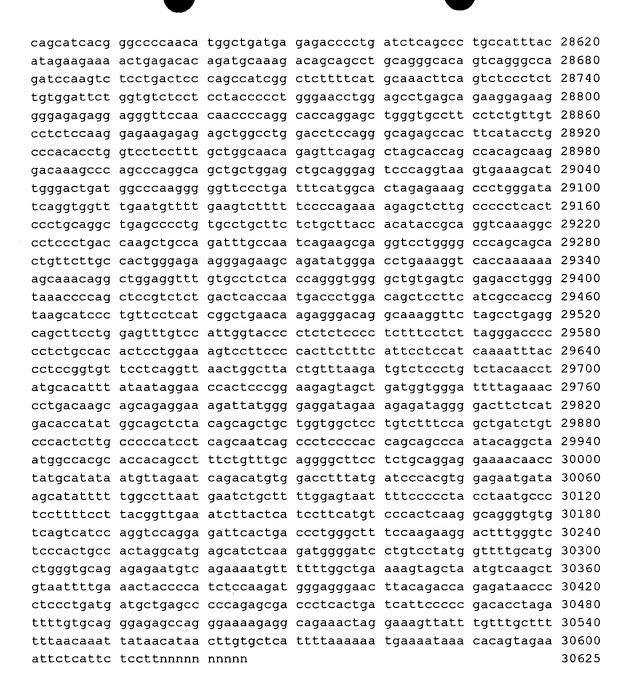
aagtgacgtg aactggttta agttttttaa ggatcccttt ggctagtggg ttgaaaataa 11340 accgaagggg gtgaaggatg ggggctggga aatgggttag gaaaccactg cataatccag 11400 gcaagaagtg atatgggcgt caaacagggt ggtgttattt gaagggggtg gaaaggggtg 11460 gaatttagga catattttgt aaggacagcc aacaggattt gctagcggat tagcaaatcc 11520 aggtgtgaaa gaaagaagac gagggagata gtaattattt cagccaaagt gactaaaagg 11580 atgaagttgt aagcctgtaa ggtttgtgat gccaattagt tatctcagca ctgatgctga 11640 aaaggcagta gggatgacaa gccagcaata caaaaggaag gtcagcacca gcatcattag 11700 catatggaca gettttaatg ageetggaca agateaeeta ggaagtgggg geggatagaa 11760 aagacagagg gctgccctaa catcaggagc cccggaacac tcctagaagt cagggacaag 11820 agggggaccc agccaaggag accgagaagg agcagtcaga gggataggag ggcaacccag 11880 gtatgtcctg gaagcctgga ggaagcgttt ccaggagaga gtggctaaca gtgacaaagg 11940 ctgctgagcc aagcatggga gaacccagaa gagactattc tccagattta gcaacaggga 12000 agtcattggt ggccttgatg agagctggtt gggtggagca gtaggggcca aagcctggtt 12060 ggagctggtc caagagaggt ggaggcaatg ctttaaagga gttttcaagc gaaggagaga 12120 gagtgtggca gtgctgtttt ttatgataga agaaatacag catatctgtg agatgattgg 12180 aaagatccag taaaggggac agaattaagg atgtaggaga ggaagttgca ggagtgacag 12240 ccttgactgc agcccagcct tgactgcgat ttgctgcatg gctgagagcc agcttctgct 12300 gggagcccag acagttcatt ttcaggagcc cagagaaagt agaataagtg ggcacccaaa 12360 gccagtgggg cagtggtggg cgctaggggg aatctcttct aatggcttaa cctttctcag 12420 taaagcagga agcaagatca tcagcggaga tgggagcaag ggatgagagg tttgcaaata 12480 gagaagaagg totgaaacag gtttotagta aacttatoag gtgttgggac tgggaaatca 12540 gtgccttccc aaaatcacag atcccccca agggcagatt caaaatgaat ggcagcagag 12600 aaccetgtgt gtteetgagt eaggeaegat gteetttaga ggagagaeet ggatagagaa 12660 gtgaattctc cctgagaaat gggaagtgtt attatcctca ttttttcaga ataagtaacg 12720 gaggcacaga gctgttagga acttgtcctt ggtcacgact tggaaatgct acagccagga 12780 cttaaacccc aacgtcgggc cccaaagcct gtgcccttcc ttacctacta agctcactgg 12840 ccattetetg aceteacaea caceaggaag gaggetgggg agaceaagge teagggaaae 12900 tcactgactc cctcaggtca cacaggggtc aaagtttctt ccatctggct ggattcattc 12960 ttctgttcca caaacatcaa aagtccctca aggcacgttc aaaaatcagg ggaggccggg 13020 catggtggct catgcctgta attccagcac tttgggaggc caggcaggcg gatcacttga 13080 ggtcaggagt tcgagaccag cctggccaac atggtgaaac cccgtctcta ctaaaaatac 13140 aaaaagaatt agccaggtgt tgtggcacat gcctgtaatc ccagctactt gggagactga 13200 ggcaggagaa ttgtttgaac ccaggaagca gaggctgcag tgagctgcga ttgtgccact 13260 gcactccaga ctggatgaca gagtgataca tctcaaaaaa aaaaaaaaa aaacagaaag 13320 aaagatttat ataattttta actcaataac cctaagaagt atgtgctgtt tagtaaccct 13380 atgttgcaag ggaggaaacg catagagagg ctaacttgct caaggtcaca cagaaaataa 13440 ggggcacctc tgcactatat acactttccc catcttcaca acaagcctgc aaggtgggaa 13500 ctattatctc attccacagt ggaggaatct gaggcccagc gaagccaagt gatttgccta 13560 aaatcacaca gctggtaagt ggcaaagcct ggactcaaac tcagggctgt gccctggtga 13620 gaaatttgaa atggaaaggc ccaggatcat gttagagcaa accctggggc cccagctctt 13680 caaacgctga attctaattg ttagagctgt ctgtgtcccc ttgatacagg agcaggcagg 13740 cagaggeeet geetgtaeet tggaaceeag eetaggatea geaetgagaa aacaaagete 13800 aagtgtgttg actgaattgg ggattatact cacaactctt ccctaaacag acaagatgct 13860 aagaggetga atgtggtaat ttggatttat ttgtgtttat tttcattete ttttaggeta 13920 cacacaaatg tgaaaaaaa aataatagtg tgtaacaatt aaggaattca tacagtttct 13980 ctgaagccag accggagtca tttctaacaa atgtgatgag aaaacaacaa ctatttaaaa 14040 aaacaatact cagctgaaaa ttctcacttt ctccagctgc tgtcttcaga gccacccggg 14100 aggggaataa acaaggctgt tgactacagc tctgttccac attctctgat ggttctcagg 14160 ctttggcctg catcagaatc acctggaggg cttgtgaaaa cacacattgc caggcccttt 14220 tccagagttt ttgattcaat aggtttgggg tggccctgag aataagtaat tcttttttt 14280 ttttttttt tttttgagac aaaatttttg ttcttgttgc ccaggttgga gtgcaatggc 14340 gtggtctcgg ttcactgcaa cctctgcctt ccgggttcaa gtgattctcc tgcctcagcc 14400 tcccaagtag atgggattac aggcacccgc caccataccc agctaatttt tgtattttta 14460 gtagagacag ggtttcacca tctcagccag gctggtctcg aactcctgac ctcaggtgac 14520 ccaccagect cageeteeca aagtgetggg attacaggtg tgagecacca egeecageca 14580 agaatatata gttctgacaa gttcccaggt gaagctgata ctaccagtcc aggaaccaca 14640 ctttgagagc ccctaaccta aacagacctg aagcacagca ggcaaagaga tcaaagctgt 14700 gtacctttga aagaaggcgt caagtccttg ccccaacccc tctctggcaa ggaggtttgg 14760 tgggccaaaa accaacctgg gctggaaggc tatattattt ttagacaata ggagcacatc 14820 cataaatata cacacttact atgtacccac agagatttac aacaaaaaaa attgttttaa 14880 ataggagtac acaattcacg gggtatatan nnnnnnngag tgcagtggcg tgatctcggc 14940 tcactgcaac ctctgcctcc tgggttcagg caattttcct gcctcggcct cccaaatagc 15000 tgggattaca ggcacacgcc actgcaccca gctaattttt gtatttttag tagagacggt 15060 gtttcaccat gttggccagg gtggtcttga actcctgacc tcgtgatccg cccaccttgg 15120 cctcccaaag tgctaggatt acaggcgtga gccaccgcgc ccagcctcaa aaaaaacaaa 15180 tttaattaag aaaaaaaaa gatctaaaga tggttccata tagctgagca agataatgga 15240 agagagaatg agaagctggc aggccccaga tcctacaggg ccttgaatgc caggctgagg 15300 tgcctggact gcctctccga gctgtgacaa acatggagca ggtggcagct gaggctagaa 15360 ggctccccag gctccctgct ccagggctgt cctgggtcag tgactgggga gggaatcgga 15420 ccctcggatg cacttttgcc tcccaaaact tagtctcagc ctcccaaagt gctggcatta 15480 caggogtgag ccaccacac cggcccatct ttagatctta aatgagccat attctccctc 15540 atctacatgt tttgtattct ccctcatcta cacgtttgca catgccattc ccttcggctg 15600 cagcccctct aaacaatcct tagtctttga tggccaactc ttactctcct tggcatctta 15660 gtttataaaa ccttcctctg agaagccttc ctggatttct caaggcaacc tgggcttaca 15720 tggtctcact gttttgtcat tgtctgtgtg gctgtctcac tcactaaact gtgaactgtg 15780 agggtcaggg gccaggtctg attcactccc agcagctagc acagcaaatg tttgtcgata 15840 aatgcataac aaaatgaatg gatcctagtc tcagttctgt ttctagaata gcgcctcaat 15900 aaaataggtg cttagtaagt atttgctgac tgaagaaact tgctgcacag ccttgaacaa 15960 qtcactqcct cctctqaact tcaqtttctt cctctqaaat aggqatqcta qtqttccctt 16020 ctcaactccc tcataaggga gcaaagggat gtggaacttg ccatcacccc agtgcagggt 16080 ttctcaacca cagccccatt gacactggag gctggaccat tccttgttgc agggccccgc 16140 tetgtgetet geaggatgtt tagtggeate eetggeetet atceattaga tgeeagtage 16200 cagtagccac cccactcagt tgtaacaacc aaaaatgtct ctggactttg ccagatgtcc 16260 ctgggaagca aaattggccc agttgagaac cactgctcta gagaaagctg cctgccagag 16320 aggagetgag ggaggaacag aetgtgetee aacateetge eeagageaga ggeeeetggg 16380 gagttcaaaa agcaccagcc tggttggctg ggcccctttc tttgtctgtg gggcctgtga 16440 aatcagtotg gotoototgo caccaccaaa goootttatg tocagatggg aggggtgooc 16500 cttectattg ggtcacctga gaaccccatc cagcacctgt cacteccctg ctctggcact 16620 tocaccetee eccacetece acceetgtat eccacececa geetaacatt aggaagetet 16680 cctccaactg tgaccttctt acctacctgg tctaaatccc ccaactccca ggcacaaact 16740 gcctcctcag ccaggccagg cagcccattg tcccaaggac accaggagca gcctgccttg 16800 ctcctgcctt ctccccatcc tgggctgctc tccccgcccc ctgctaatct gaatccagtc 16860 attttgagte eeggeacatt cettgeetag etgtgtgace eagageaatg cacteecete 16920 tcagagcccc agtttcctca tctgtaaaac aaggatagtt gcatttctct cccagggtag 16980 ctatgcagat taaattattt gtttgtaata atgatcctgt aacacttagt aagtacttga 17040

ttcctgtctg tttattgtta ttatcatcat gaatcgacag atggtcccca gtctttttt 17100 ttttttttt cctttttgaa acggagtttc gctcttgttg cccaggctgg agtgcaatgg 17160 cacaatcttg gctcaccaca acctccgcct cccagattca agcgattctc ctgcctcagc 17220 ctcccaagta gctgggatta caggcatgtg ccaccatgcg ccgctaattt tttgtatttt 17280 tagtagagac agggtttcta catgttggcc aggctgatct cgaactccgg acctcaggtg 17340 atccgcctgc ctcggcctcc caaagtgctg gaattacggg cgtgagccac caagcccagc 17400 ctccccagtc ttgctgaaca ggctttctgg ggccacatgc tgggaagagc atgatgtgaa 17460 aagacctcag ctgaagttcc aactctgctt cctctccaag tggcagcttg agcaagccac 17520 ttacctcaga gttgtctcct tggagcctca gtctcctctt ctgaaaaaatg gctaaaacaa 17580 tttqtqcccc tqqqtctqtc qtgqtgctcc catgagctag tgagtgtgag aatgtttttg 17640 cacatgtctg ccctgtacat ctgagggact gaggaacctg gttttttaaa ggcctggcca 17700 gaggaaaacc cttacagcca gcctttcatg ttctgtcagg cctctgcatg ttcaaaccct 17760 ctgttcttga aaacaaagaa acacaatcca ctcactgcca aacacctgtg ctgggctgtg 17820 ccccgggagg gctttctccg ctgcttgggc aaaaagtgat ggctcagtgg tggccaggaa 17880 aaatctcctg ggacctccac agtccatgat ccttcctgaa tgcctttgac ctcaaggtct 17940 cagaaatgct taaatgaatg gacaacacac ctggagacca gacgggctgc ctcagtgtct 18000 ggcttgtttt tataaatctt ggtgtcccgg gacttaaaaa tgagctctga cctgtagaat 18060 aqtqaqcccc caqqqactgc gcttgttttg ctgggcctgt cacctcctgg ggatgaggga 18120 cagatggagg aactgatttc tcagaggggg aaggggtgtt gccatgcccc ttctaggtcc 18180 ctttctggtt tgaaggttgt tactcctgtt agccctagcc tcggggaggg agccccagga 18240 gccaagaccc tgtgttaatg attcgtgcaa ggccttggag gtggcttcag ccagggtgcc 18300 acaccetgee ecageeteae ecettggggt ataaaagtet eetaagagte aggeeaeaee 18360 cccgcctaag agagtggcag gccctgcccc taggccggcc cagtgagtgg caggccctgt 18420 acceatectg teeectggge tteaageage acaggteege tegecaggge tggeatteae 18480 tgggtcagga tttcctccaa tctgcaggct tatctttgtc tactggtctc agacccacgg 18540 agageceet tgteteete etagggtgee eteccaetea teagtggeae cacaagtgge 18600 tcacattgtc ctacataagc tacaagtctg aagctgagcc cttatacctg cttgagggta 18660 ccccccgccc cgcaccagtc cttctgccct gagcctcggt tgctgcctgt tgctggtctc 18720 aaatcaccca ggcgccttag atatcatgcc taggttcccc cagcactctg aactgctgct 18780 gttcatgcct gggcactgtg catcgctctt ctgcccctcc gctgtcacac ctgagtgtga 18840 tccacatccc actgtcatag gggtggccca cctatgtctg attaggttcc tcttctcaat 18900 ctagetette eccetaceae acaeteetee tacageteee teccaeteee aceteeegae 18960 cccactgtgg gaattgccca cattccacca ggcaggggcc ccctggttct gacaagctgc 19020 ctgtggccag tcagaccaca gggtgaaaca tccagccacc aactcagtgg ccgtcctctc 19080 ttggttcccc gtcttctatg tccctggaca gaggattgtg tttccattga cccctctatt 19140 cacaaggcta attacttcca tacagccctc taagtccaaa ggacagaaac aaagagggta 19200 aaatgcaaaa ctaaacttac tcctggcaaa gatcatggaa ggaacttgat ataggtcact 19260 ggtccagtgg gtatatgaac agaggcacag ttcagggact ggctgtagct ccctgttggg 19320 gacagtecce ateattgagg catettattt etgeacatea gtgeageeaa eagaggeaae 19380 tgaagtaggg agaatgctcc agccaagcat aaccatgtcc ccacttcgcc agtaaaggaa 19440 agagccagag agctggatgt ccaagacccc aaggaacaga ggcaattcct tcttcccact 19500 tttcctcatc tctgtcttgc tgttgcctgg aaatggtcat tcaggctaag gaaagccaat 19560 cccagtttcc tccttctcct ctggccagtt atcagctccc tcagggagca gagagtaaac 19620 agaggtetta acaagggtte atgaaatttt tagteagace tgetaageeg gtgtggeeag 19680 cccagagcca ggtgatgcag cccatgccac ctgcccaaca caaacatggc cagtttaatt 19740 tggtgagttt ttccggaaat gtgccacaag ccaggccctg gggtgggctc tggacacaca 19800 agggagagcc ccattagaca gtacacggtc cttgccctct tggtgcaaat ggggaaatag 19860 ggcaaaatgt gatcacagaa gataataccc cacgccagta tcagggcaca aataaagcta 19920



aggggcaggg gactacette cagtgtetee etceageeea geeetgaeet caggaagtgt 22860 cagageatgg ceagtagttg geageeegaa agacacaeag caccetetta tgteeeatgg 22920 cctaagactt acccctgacc aagctagtga tgggccattt acccttgacc ccagtccaca 22980 gtggtcacag gtagtacctg gtcctagggt tgcctgaaag ccaacctctc ctgccacccc 23040 cacaccaaga aatatatggt tectaettet eccaetgate tgetggteag tgatgatget 23100 gtggcctgtg gaaggcacct ggtaattgaa tccacacatt atagtcatgt gccaccacct 23160 tectgeecae aggeegaggg acagggtgag ggtataecea aagetgatge aaageecatt 23220 agectaaaag caactgeagg acaageetee etggatgate gaggteeeca gtagetetga 23280 acaagagtcc agccaaccct cttcagccag gcctctgtga cctgctaggg tgcaggaggc 23340 ttccagaagc agttgttgta attaggaccc aagcactggg gaggggctgt tggctaaacc 23400 ccttgtcaga cttggcatct atctcagtta ggatcctgct gcagaaaaca agagccactt 23460 gtagctggtt taattagaca aggatttact acctggcccc tggtggcttg caaaattgtt 23520 ggaagagctg gagaagcaga ctctgctgaa tttccaggaa ctcccagcgc cagattcatc 23580 atgtctgttg tgaccaggaa agctgcccc atctgcagga agccactatg ccagaaagct 23640 gctgactgca gaactaggct ccctctgcca cggtccgtgc cagccaatag atgtcctgag 23700 qcctgccct ctcccacttc actcagttcc caaatctaaa tttttacaag agattctgtt 23760 tgggggaact taagtcagat ccagaacctt ggctgcaagg gagtctggga aatgtcattt 23820 ccctagaagg aagttagggt gggtggagca agcccacct gcgtttttct gccacagcat 23880 ccaatcgtga aaaactcggg agagggtgga gtccacatct agggttgtcc tgccccttgg 23940 ctctatccct gcccagaggt gggaactgga ggagtgggct gcaaaactga gcctaaatgt 24000 ctccccggcc ttgacttttc tttctagtcc tggggcctaa attctgcact tggggtctct 24060 gacacaacac accatcccaa agtagccgga aaagctaaac acagggggtt cttaaaatgg 24120 ctgccccgc cacccgggcc tcccttgggc aaaaggaatt gtcagcccta ccccaaccct 24180 tcaactacca gaatctgggc caccccagca gtatttttat ttaaaatgtt gcccatttta 24240 tgagttatga tcaatttgta ttaaattaaa gttacagatg tcagtagcca gttccattca 24300 ttttgacaaa cacacaggcc cacccagctc tgtcccaggc agtgcacaca catgagcata 24360 gctaatccac aaagcagccc ggctgggtaa atggtattat gctcatttta cagaggagga 24420 aaattgaggt tcagagagaa gccaagactt acctggggtc ccatatccca tgctggcaag 24480 tgccacacca caaacctgtc caaaaactta ccagccaggg aaggctgtca gtctttacct 24540 ggaggagagg tggtggtagt cttgggagca ggcagcaggc agctcatggg gcagtggcaa 24600 gagectggtt tegggaacea caeagacete ageteaaate eaggeteeat eaetgtgtga 24660 ctttagaaaa atgaccaccc tctctgggac tcagttttcc cacatggaag atgaggatac 24720 caatttcaca taatttattg gtaagctgta aagtgcagtg cacttaagga ggccctaccc 24780 tatcccccca gctgcctccc agagtcagtg cctggagttg tatgggtttc ctgaacctct 24840 gggctggctc tgacccaaga agtctgtctt tctccttatg ggctgtgacg ggtatggaac 24900 cacctagacc aggaccatcc tgaggtccat cccacctctg actgatgagg aagcatcctg 24960 gctgggagtt aggacaggct ctgcatgtgg acacacaggc tgtgcacact taagtggaaa 25020 agactgtcga ctaaagaaga aatatcaagg ttttaaagga ttaaagttca ctttacttag 25080 aagtettaet gagtaetata gaeaggeeta gageeeagea geggeeettt agagaggtte 25140 tatcagtcgg gcccaggaca gtattttagc ccactgctta tatacaggtg gtggaggttt 25200 agtacacgca aaatcacatc acacttgctc agaagtaaca ttaaagccac cgggcgcagt 25260 ggctcatgcc tgtaatccca acactttggg aggccaaggc aggcggatca cctgaggttg 25320 ggagttcaaa accgccctga ccaacgtgga gaaaccccgt ctctactaaa aaatacaaaa 25380 ttagccgggt gtggtggcac atgcctgtaa tcccagctgc tcgggaggct gaggcaggag 25440 aatctcttga acccgggagg cggaggttgc ggtgagctgg aaatcgcccc attgcactcc 25500 agcctgggca aagagcgaaa ctccgtctca aaaaaaaaag aagtaacatt aaagcggaat 25560 catatatcaa cgtttgcatg taagagtgtg tctgggctat agattacaga ggcataatca 25620 tgaatgccat cagacactat cttctgtaca ggaaaaggca aggactaggt ttatttatct 25680

tttaaggaac gtagtgactc aggcaagaga catgggggcc atgcccacta ttctgtcttg 25740 tctccaaagt atccctccac agagccgcac atggtcacag agtcagaggc ttgtgaaatt 25800 atgctggcaa acagaaatga gggaagtagc ttcttccatt tgctactgtg tctcccaggc 25860 cactgggtgc tctctgcagt gtgcaaggga gtacagcacc cctgggagcc caggactggt 25920 gttggctttc tgttaagtca ttttcaccct aagccattct tggcctcctc acccacagaa 25980 tgagggaggt taggctgcag gccacaggtg gatcttcatc tacagcctgg agctggggag 26040 agggaaccac cccagtcatt gacttgcctg ggtttctagg aagaggaatc aaaacaagga 26100 tgggaaacgg gctgttggca ggggtgggtg gaaaagtctc tgattgtctg atggagagca 26160 gcccagttca cagggaagtg actggggtga ttctgagaat agagtatccc aagccctccc 26220 ccatcctctc agatccctgt gactgctcta aaaccacgcc ctctcatttt ggctcagtgg 26280 atotgtottt gotcagoott otocototgg ggtoggagoa coccotocat ggogoattoo 26340 accttctccc cactcagcct cagcagcagc tccaagaaat gctggccact tcccaggctt 26400 tactcacagt ttccacgtgt gtggaagtaa ctatagaggc caaatttgca ttatcaactg 26460 gggactcctg gaaatggggg tgtctccaaa agatatattt gatacacctc cagagaattc 26520 ctgaaggaaa gaatctgggg ttgtcaggct gatatcatga accccacatt taacacatta 26580 agtgaagaga ggggacaaag gccaggcttg ggaaggaagg agggatcaac aaagccctta 26640 cccaggacag ataaaaatga tagaatggca gtaaccccat ttggagcccc catttgtagt 26700 cagcaagcaa agtactggtc ctttttacac cttatctaac catcgagaca cgcccctgtg 26760 gttggtatca ttatctcagt gtttgagcag ggaaacgtca cttcccagag gacccacagc 26820 cagtactcgg cagagetgga aatcaaacce ggtecateca aagetaaage cagatgtete 26880 tttactggac ctctctggaa atgcttctca actttgatga tggctccagt gacaggcagc 26940 agccaccagg actgtgatct ccctgggatt taaagtggga ggttaaacca ggctccacgc 27000 cactgoggaa ttgtgcaatt gtaagtcaag totcaattgt gagocaagot totcocaggg 27060 tcagaggtgg agttagaaag gccccatgtg accctgagca agtctctctc cttccctggt 27120 cctcagtttc cccatctcta ttggggaagg gttaggtatc tattctagtt gattaattgc 27180 cagggcctga gctctgatgg tccaggattc tgtaagtcta acgttaggtc ccacggcttg 27240 ccctgctcag cacctaataa ggccattagc tctggctcct tctctctggg gtggcagcag 27300 ggacagaaaa caacagagat acattctctt ggcagcacag aactcagctc aagggttctg 27360 gggatggggc cttccctcct gccagggagg ccatctcgag aggctgactg ctcacacctg 27420 ggcagcactc tgtctcctcc cctcctgcct gggtcccagc tctgttcacc accccaaagc 27480 acatcaccac aaggtcagtt gcaaaggccc ggtatcacag gcttaaatac agagggctag 27540 gagggaggtg ggaggtggga gaggaaggtg gagtactaac aaaggtgttg aattatcact 27600 gcccatcagg acacggttat ttccccttac tttgggacac caaagattct acacaatctt 27660 cctataatcc tgaaccacaa aagggaggca cagcctccaa aaaaaagtag gagaggggag 27720 gggggaagta cttttatttt gaaatgtgtt catttttctt tgttttattt tctatcttga 27780 tgaaaagaat atatttttaa acctaaatac aaaatagtac agttttctat ttttttttaa 27840 gttccaggat acatgtgcag gacgtgcagg tttgttacat aggtaaatgt gtgctatggt 27900 ggtttgctgc acctatcaac ctatcagaac agttttctat ctgctttaaa aatttcaaca 27960 gttctatcat atttttatta caaaatgctc cccctccct tgaaattaaa tgaagagggg 28020 gaagggttga cactgtggac cagagaccca gggacttcct accctgatgt catgataagg 28080 gctggggaag ggctttcagg aagctggcat cagaggcaca aagcttcagg tcctggtgag 28140 cttcccaaaa ctgtgagact agatgtgatc gaatctgaat gctggaaggg tctgagtgat 28200 cctccagtct aacctgaagc ccagagagg ttagtttcta gctccacatc acacagcata 28260 tggtggagct gagatgagta ctcaagtgtc ctggttccca gtcagcacat aggggaggga 28320 gattgactaa ctgagagggc cccagcccag gcaaagaaaa ggaacacagg ccaggctgga 28380 agggacaggg ccagagctta ggagggaggt gctcagagga gaagggtccc acatctaaga 28440 aggtttgcgg gggtacaaga gggcctatca gagttggggg ctgcagctcc tccgagagga 28500 gaaggagggg gcaaaagggt gatcaaatca ggaagtcctc cctggggtgt gcatgccagt 28560



```
<210> 6
```

<213> Human

<400> 6

```
gaattccata tacaggttta ttccaatccc tatgaaagtt tcaatggcat tctttacaga 60 aataggaaaa gcaattctaa aatttgtatg gaaccacaaa agaccacaag tagccaaagc 120 aatttagaga aagaaaaaca aagttgaagg catcacattt cctgattttt aattatatta 180 taaaggtatg gtaatcaaaa cagtatagta ctgacataaa agacagacac atagacaaat 240 ggaacagaat agagagccca gaaataaact cagtcatata tggtcaacta atttttgaca 300
```

<211> 45845

<212> DNA

agggtaccaa gaagacataa tggggaaaag acagcctctt caatagatgg tgctgaaaaa 360 ctagatttcc acatgccaaa aaatgtggaa actggactct tatattatac agaaaaaaat 420 caactcaaaa tggacaaagg acctaaatat aagaaccaaa accataaaat ttctaaaaga 480 aaacacagag gaaaagctcc ttgactttgg ccttggtaat aattttctgg atatcacaca 540 aaaagctcag gctataaaag caaaaataaa taaatgggac tacatcaaac caaagagctt 600 cttcacaqca qqqqaaacaq tcaqtaaaaq qaaaaqqcaq catacaaaat gggagaaaat 660 gtttgcaaac cgtacatctg atatccaaaa tatataagaa actcaaacaa ttcaatagca 720 aqaaacaata gcaagaaaac aaataaccca attaaaaaat gcgcaaagga ctgaaaagac 780 atttcttcaa agaagacatt aaaatggtca atacgtgtat gaaaaggtgt tcaacatcac 840 taatcatcaq qqaaatqcqa atcaaaacca caaqqaqata tcacctcaca cctqttaaqa 900 tggttattat caaaaagatg agagataaca catgttaaga gtgtggagaa aagggaaccc 960 ttgtacactg ttggtgggaa tgtagatcgg tacagccatt gtggaaaaca gcatggaggt 1020 ttccaaagaa attaaaaata gaagtactat atgacccagc aatccttctt gtgggtatat 1080 acaaaaatga aataaaatca tcatctcata gaaacgtctg tactcccatg ttcattgcag 1140 cattattcac aatagccatg atatgaaaac aaactaaaat atccatcgat ggatgaatgg 1200 gtaaagaaac catggtgcac atatatgatg gaatatcatt cagccttaaa aaaggagatc 1260 ctgccattta ccacaacatg gatgaacttg gaagacatta tgctaaatga aataagccaa 1320 acacagaaag gaaaatattg catgatctca cttatatgtg gaatcatcaa aaaaaagaaa 1380 aqtcaqaaaq atqqaqaata aaatqqtaqa tqqqaaqqaq taaataqqqa qatqtagatc 1440 caaggataca gtgttgtagc tatgtaggat gaacaaatct ggagatctaa tgtaacacat 1500 aaggactatc actaataata ttgtattata tttgagattt ttgttgaaag aatggatttt 1560 aggtggtatt cccacaaaag gaaaggagta actatttgag atgatggata tgttaatttg 1620 cttgactaca ttaacaactt cgccaaatgt atgtatacca aacatcatat ttaaggtatt 1680 tatatacett aaatatatae aataaaaatt ttaaataaaa aagtgatett caetgggetg 1740 aggaactcca ctattqttcc tagcacattg agtgttttaa tcaagattga gtgctggctt 1800 ttataaattt tttttctgca tcaattaaga tgattatata gcttttcttt ctcagcctgt 1860 caacatgata aattatagtg attgatttgg gatgcttaaa ccaatcttac attcccgagg 1920 catagtatcc ttttggtcat gatatagcgt cttttttttt tttttttatg gagtctcgct 1980 ctgtcaccca ggctggagtg cagtggcgca atctcggctc actgcaagcc ccgcctcccg 2040 qqttcacqtc attctcctgc ctcagcctcc ccagtagctg ggactacagg cggccgccac 2100 catqcctqqc tqattttttt tqtattttta qtaqaqacaq qqtttcacca tqttaqccaq 2160 gatgatetea ateteetgae ettgtgatee geeegeeete geeteeeaaa gtgetgggat 2220 tacaggegtg agecaceaeg eeeggeetga tacagtgtet tetttatata ttgttaaatt 2280 caacctqctq qttttataqq atqaattqqa aaatattccc tcctcttcaa ttttatqqaa 2340 gattttattt agaatttgta ttatttcctt cttatatgtt tggaagaatt cctcagtgaa 2400 gctgtctgga cctggagttt tatttatgga aaggctttta aatacgaatt caatttatgt 2460 aatatttgag ggctattcag gttatttatt tcttcttgag tgaactttgg tagtttttat 2520 cttttgagga atttgtccat ttcatctaag ttatccaact tcttggcaca aaggtgctca 2580 tagtactece ttattateet tttgatgtat ttagaatetg tggtgatgte accettteat 2640 tcttggtatt gaaataattt atattttctt tccctttttt cccaaatcag tctggataga 2700 gatttgtcaa ttttactggt ctgctctatg aaccagcttt tgttgtcatt gatgttctgt 2760 atcgcttttg ttttctattt cattgaattt tgctttcatc tttatcattt atttcttctg 2820 cttactttac atttaatttt ctctttttgt tgtttcttaa ggtgaaagct aaggcccttg 2880 attaatatag agcatttagt gctataactt tccttctatg tactatgtag cagcatccta 2940 caaattttaa tatgtgtatt accattttaa ttccattcaa aatattttaa tttgtctttt 3000 gatttcttct ttagcccatg gattgtttag aagtatgtta ttcagtttct aaatacttgc 3060 agattttcca gagatctttc cattattgac ttttaatttt atttcattgt tgtcaggaaa 3120 tatactttat atgacttgag ttcatttaaa tttatcaatc cttgtttcat gccccagaat 3180 atggtctqtc ttagtaaatg ttccgtgtta gctgaaatta atgtgtactt tgctgatgtt 3240 qqatqaaqtq ttctataaat qtctattaqa tcaaqttqqc tqacaqtatt qttcaactcc 3300 tqtatcttta ctqatctatq cctactcttt ctatcaactt ctaataqaaq qqtqttqqaa 3360 tetectaeta teattgtgge titgtetett titeettgea gitegtieta teagitititg 3420 cttcatqcat gtattagttt gctagggctg ccataataca gcactataga caatgtggct 3480 taaacaaaaa aaaaattatt tootoacaga tatggaggoo agaaatocaa gattaagatt 3540 tcaqcaqqqt tqatqtcttc tqaqqcctct ctccttqtct tqtaqatqac qqtcttctcc 3600 ctgtgtcttc acatcatatt ccctctgtac cttgtctgtg tccaaattct ctcttcttac 3660 aaaqacacca gtcatagtag attagggccc accctaattt aacctgatta tctctttaaa 3720 tatcctatct ccaaatatag tcacattgga ggttaggact ttatgatttt ggaaagggta 3780 cacaatttag cccataacaa tgtatttcaa agctccctta ttagttgctt aggacttcta 3840 tqttctcctg attaattgac ccccttttct ttgtgaaata actcacttta tctctaataa 3900 taacctttac totgaaatot acttoatttt gattggctat gatgtgatat atatttttcc 3960 atccttttac ttttaacctg tttgtatctt atatttaaag tggatgtctt ataagtaaca 4020 tatagctgtg ccttgctttt ttattcagtc tgaaaatcta tactttttaa ttggagtatt 4080 taaatctttt acattaatgt aattcttgat atggttgagt ttgaattctg gctatctgac 4140 ttctgtttgt cctatttcaa ttttttcttc cattttttct ctttttctgc cttttttgga 4200 ttqaqtattt tttcttctct ttcttttta agagacaggg tttcactctg tcacctgggc 4260 tqqaqtqcaq tqqcacaatc ataqctcatt qtaatqtaac ctctaactcc tgggctcaag 4320 tqatccttcc accttagctt cttqcctaaq qtattttqtc acagcagcag gaatagataa 4380 qacaacaqcc taccttcaag tqataqtaca ccacctcaca aacaqaatat qacccttata 4440 acagtacact tecaettage eceteetgga etttgtgeta ttgttgteag atattttaet 4500 ggtttttttg ttttgttttg ttttgtttgt ttgttttgtt ttgtttttga gatggagttt 4560 tgctctgttg cccaggctgg agtgcagtgg cgccatctta tctcacggca acgtctgcct 4620 cccaggttca agcaattctc ctgcctcagc ctcccgagta gctgggatta caggcacctg 4680 ctatcacacc tggctaattt ttgtattttt agtagagatg gggtttcccc atgccaggat 4740 qqtctcaaac tcccaacctc aqqtqatcca cctqcctcaq cctcccaaaq tgctqggatt 4800 acaggcgtga gccatcatgc ccggcctaga tattttactt ttacttataa ccccacagta 4860 acaatqcatt qttattqctt ttqctctaaa ttqttqatta tctttaaaqq qatttaaata 4920 atttttaaaa ggcattattt tttacccaca taattgccat ttccagtact tttcatttct 4980 ttacatagat ccagatttcc atcttgtatc attttctttc tgcttgaata acttccttta 5040 acatttcttg taagtacagg tctgctggtg ataaattctt tcagtttttg tatttccaag 5100 aaagtattta tttccccttc atttttgaaa tatattttca atgggtgtag aattctagct 5160 tggtagattt ttcctttcag tactttaaag atgttgttcc actatctctt agcttgcatt 5220 gtttataata aaaaaaatct actgtcattc tttgttcctc tgtgtaatgt ttcttcttcc 5280 tttagcggtt tttaagattc tctcatttta acttgttttg agcaatttga ttgtgatgtg 5340 ccttggtgta ttttttcttt atgtttcttg tgtttaggtt tgttgagttt catggttatg 5400 tgagtttata gttttcatca aatttggaaa tttttcagat gtttcttcaa tttttttctt 5460 ttcttccctt ctctccttaa gggactccaa atatacatat gttaggctgc tttaaattat 5520 cccatgactc actgatgctc tttttatttg tttttgtctt ttttctttct gtgttttatt 5580 ttggataget tetattgetg tatetteaag tttacaaate tgttettetg cagtgteaaa 5640 actgccatta atctcatcca gtatattttt cacttcaaac attgtgattt tcatgtttgg 5700 atgtttgatt tgagtatttt taaaatatct tctattattc tgtttaacat gtttaatctt 5760 tcttctqqct ttttqaacat atqqaattca qttacaattq qtqttttaaa qtctttqcct 5820 cctaattcta tcatgtgtca cttctgggtc agttttgatt gattgactga ttgacttttc 5880 tctttttaaa tttttqatac aggatcttqc tctqttqccc aggctqqaqt ataqtqqcat 5940 gatcatggtt cacatcagec teaaceteee aggeteaagt gateeteeca ceteageete 6000 ctaagtagct gaaactagag gcgtgcatca ccatactcag ctaatttttg tattttttgc 6060

agagatgggg ttttgccatg ttgtccaggc tggtctccaa actcctgagc tcaaacaatc 6120 tgcccacctt ggccttacaa agtgctggga ttacaggcat gagccaccat gcccagcttt 6180 gacttttctc ttctttttta tttttgtttt ttaaatttaa tagagatagc atctcactgt 6240 qttqcccaqq ttqqtcttqa actactgggc tcaaataccc tggtctccca aagtgctagg 6300 atttaggatt tataggcatg agccaccaca cttggccgac ttttctcttc tttatacata 6360 gtatttttct gcactttcac ttgcctggta attttttatt ggatgctaga cattgtaaat 6420 tttacttttt ggggggctct ggataatttt tatatgccta taaatattct ttagctttgt 6480 tottaatgta gttaagttac totgagataa tttgatoott toaggtotta otttoaacat 6540 tcttqqcaqa accccagtag catttagtca agagttaaat tcccttgtta ctgaggcaaa 6600 accettetga gtgetetaca cagtgeetea agagttatga gattttteta etgtggeegg 6660 tgggaagatc actattcctg actatatgtg aactctgaga atgtttttct ctactctttt 6720 tqtaaaqttc tttcccaaqq cttqqqtcat ttcctcacat qcacatqatc agtactcagt 6780 actatgaagt gctctccttt ctgggactct gcccggcaaa ctctagcttc cttggcttcc 6840 ttggcctctc agctctgtct cctcctctca gaaagacctc cagggttagc ctgggttccc 6900 tcccccqtac tqtqqcctqq aaactctttc taggcaqtaa ggttggaaac tgtttagctc 6960 accttgcttg tttcccagag attgctcccc tttttgccta atgtccaatg ccttgagaac 7020 catcgtttca tatatagtta tgcactgcat aacgactttt gatcaatgat ggacgcatat 7080 qtqacaqtqq tcccaaaaqa ttacaatqqa qctqaaaaat tcctatcccc tagtgatgcc 7140 atagecatet gtattagtea gggtteteea gagagacaga aetaatagga tatatgtata 7200 tatatgaaag ggagtttatt agggaggatt ggctcacacg attacaaggc aaagtcccac 7260 aataggetgt etgeaaactg gggaggagag aagecagtag tggeteagte tgagtetgae 7320 agceteaaaa caagggaage caacagtgea geetteagte aatggetgaa ggeecaagat 7380 cccccaqcaa qccactqqtq caaqacccaq aatccaaaqa ccaaaqaacc tqqactctga 7440 tgtccaagag caggaggagc agaagaaagc atccagcaca gaagaaagaa ggaagccaga 7500 caactcagca agctaggata teceaeette ttteaeetge tttgttetag etggeageee 7560 attggatggc acccacccac attgagggtg ggtcttcctc tcccagtccg ccaactcaaa 7620 tgtaaatctc tggcaacata ctcacaggca cacccagaaa cagtactttg ccagccatct 7680 aggcateett caateeaate aaattgacae etaatattaa eeateaaaat gteatagtge 7740 aatatattac tcacatqttt qtaqtqatqc tqqtqtaaac qqcctactqc actqccaqtc 7800 atataaaagt ctagcacata caattatgta cagtacataa tacttgataa ttataataaa 7860 cagctqttac tqqtttatqt atactatqct ataattttta tcattatttt aaagtqtact 7920 ccttctactt attaaaagaa aaaaaagtta actgcaaaac aacctctggc aggtccttca 7980 qqaqqtattc caqaaqaaqa cattqttaqc ataqqacatq acaqctccat gcatqttatt 8040 acccctgata accttccagt ggggcgagat gtggacttgg aagacagtga tatcaatgat 8100 cttgaccctg tgtgggccta ggctaatgca tatgtttgtg tctttgtttt ttatttgttt 8160 gtttgcttgt ttgtttgttt ttgagatgga gccttgctct gtcacccagg ctggagtgca 8220 atggagcaat cttggctcac tgcaacctct gtctcccagg ttcaagcaat tctcctgtct 8280 cagoctocta agtagotggg attacaggog cotgocacca tgocoggota attittgtat 8340 ttttagtaga gacagggttt caccatgttg gccaggctgg tctcgaactc ctgacctcaa 8400 qcaatccacc tgactcggcc tcccaaagtg ttgggattac aggtgtggac cactgcaccc 8460 agcctgtgtc tttggtttta acaaagaagt ttaaaaagta aaacctaaga ataataattt 8520 aaaaaataca aaaaggctta tagaataagg atataaagaa aatattttag tacagctgta 8580 caacgtgtac atgttttaag ctaagtgtta ttacagaaga gcccaaaagt ttttaaaagt 8640 ttaaaaagtt tataaagtaa aaaagttaca gaaagctaag gttaatttat tatcgaagaa 8700 agaaaatttt tttataaatt tagtgtagcc atagtgtaca gtgtttatga agtctacaga 8760 attatgcata atgtcctaca acttcacatt cactcaccac ccactcactg actcaccgag 8820 agcaacttcc agtcctgcaa gcttcacttg tggtaagtgc cctatagaaa tataccatac 8880 tttaatettt tatgeeatat ttttagtetg eetttetatg tttagatatg tttaaacaca 8940

aatacttacc attgtgttac aattgccaac agtattcaat acagtaactt cctgtacagg 9000 agcctaggag caacaggctc tacatgtagc ccaggtgtgt agtaggctat gacatccagg 9060 tttgtgtaag tatcctctat gatgtttcag taaggacaaa aaacacctaa aggtgcattt 9120 ctcagaatac atcctcatca ttaaataatt atcaataata actgttttgt ccagttttat 9180 ttgttgttcc aggtgaaaag gtaaatctgg ttcttattct tccattttga ttggaagatt 9240 cttcccctct gagctgaatt tttttcttgc taaagtccac ccttcataaa ttctttgagc 9300 aaaagtetga gattagtaaa aceteagtet gtatatatet gaaaatgtet ttattttgca 9360 ttcatcctta aatgctggtt aactgaatgt agaatttgtt tttctgatca cttcaaaggt 9420 attagtccac tggcatctat tgttgctgat gagaaattgg cttcaggcag aacatcattc 9480 atttgtggat gtttcatttc tgatggcttt tcagattttt ttatttttat tgtttttcag 9540 tctcttcaat atgtctagaa atgaaatttt ttattctact cagaactcaa tgtgcctttt 9600 cattccagag gctcattttt ctttgcttgt agaaaatcct tcatcattat ttcttagaat 9660 ggtgcttctt ctcccctatt tcctccttgt agaactacta atctagtata aattttggaa 9720 cttctcattt tctcctctat gatttttatc tttcatattt tccattactc tataatactg 9780 agcactetet atgtgecaag aactataaac teatttaate eteatageaa eaceatgagg 9840 taggtacatt atagtatatt ataacattat aacattatag tatatctcca ttttatagat 9900 qaqaaaattq atacacaaaa ggcttaaaaaa catacctgaa tctctattgc tattaatagt 9960 aagtatcaga gatttaatac caggtgtgcg gcttcagacc ccatgtattt ttttttttt 10020 ttttttttttg agacagggtc acacactcgt cacccaggct ggagtgcagt ggtgcaatct 10080 ctttgcagcc tcgacttccc aagctcaggt gattctccca cctcagcctc ccaagtagct 10140 ggaactacag atatgtgcca ccatgcccgg ctaatttttt gtatttttag tagagatggg 10200 gttttgccat tttgcccagg ctggtctcca actcctgggc ttaagcaatc caccagcctc 10260 attocatact attataattt catctetttg tgctgctttc tgtgctgcct tctgggtaat 10380 ttottoagat caatttgagt gtactaatto totototoca totgtgtota atotactott 10440 taaaacatct attgcatttt taatagttca tttttgctat ttctatttgc ttcttttttc 10500 ataagetett ettettgeet tatgtetteg attectaatt ttateteatt taaacataet 10560 tacattaaaa tttctcaggt tgttctataa tcctaatttt tggcgtatgc accactaaga 10620 tctcccttca agaaagaact tgctcttcag ccacacaagt gcagttggct gactacctca 10680 agctgttagt accgttactg ccttcaagat atgcctccgt tttttagtta aggctatgct 10740 cttcttcqqc aqtccctaaq caataacttt atqaacatqq caqqtqtact ataqtcttqc 10800 tatttctgct caacaaggga ctttctctaa caggcggtat ttgttctata atcccccttt 10860 gtgttagcca agactttatc acatttgcgt cccatctaag gctctctgcc caatcttgat 10920 tetececatt tigtetitta caggeattae ceetcaataa acceetigea etectaatee 10980 cgtctctgca tttactttct ggaggaccca actaaaacag catgtgaatt atccaggtta 11040 tttcatcttc tgactttctt tcctagcaat ccttttcctc tcatactttg taatgttttt 11100 taccatgaga ttatcttcag tgggagttgt tttctataga agtcctgtgt gccctgcatt 11160 qtqqaqqaqa atcacaggta gtttcacaag aagatccatt agtttaacca gttccaagac 11220 aaactttatg tcaatttctt agctagggtt cccccaaaca tcactgccac catcacacag 11280 ttaatgcaaa catgtgaact taattctcac acccatacta atgcagattg tgattacaat 11340 tgcttccagg tgactctttc ctagctcttt tctagctcca cctgagcttt tgagctcagc 11400 tatatatttt ttaatgtact ttttatattt tacctagcat ttctatttat ttagcgtaag 11460 agataaaagg aacttettt etttetacag taccecatag teaatgaaag taaaceetgg 11520 qaqaqaqaq catatatatg tgtatatatt tctatataat ttatgttctt ggtcatacta 11640 tctatttttt aactttttat tttggaataa ttatacattc ataggaagct gcagaagact 11700 qccqaataca cttcactcaq ttcccttcat tcagggaatg tactcaggaa tctgcatttt 11760 agcaggtaat cagaggactc agatgtaggt gcaggttgtt gcagatgcta tcagttcccc 11820 atccatatcc cttggacctt tcctaccaac tgttagcaac cactcttaac caatgactct 11880 cagcattggt atataaatac cctggttccc ttacccttca tatgcgttat ttctgagtca 11940 tgttttgcac catttcccag agtctccctg ctaaattaac cgttaataaa ccactgtggt 12000 agcactetta tigicigeet teetitiett tateaattee eactieteta eecaaatagt 12060 cactttccaa ataagctaat ttaactcaaa tctttgtgtg gcggtctgta tctggtcttc 12120 taageteaga teagaagtgg tettagatee caaggatgga atetaggatt gtaaaatttg 12180 tcggccaatg gtaataagat tccattattg atggtcttta atatattgta gaggcctagg 12240 atgaattggg ggacaagata cagatacaag gggatacaac catttatgaa gtctctctaa 12300 catctgagag atgtggaggc aatggtagtt aaagaactgg tggagtttgt tggttgttgt 12360 taagtaccat tgaagtgcta aaggaggaaa atgatagggt caaattagtc aattaccagc 12420 ccaggggatg gtatgaaacc tagaaagcca ctatgacagc attttaaaat cccctaattt 12480 cctacagctg gagggcagat aggtctgaaa accacatcca gaacctaatg atgaaagtag 12540 tagaagtgtc ccactcccgt ttgctagagg ataataggct tcctcctctt gcctggaaac 12600 tatgcagagg cctcccctaa ggcagatgcc ttgcaagatg atacttgccc tcttcaagat 12660 ctgcttctac attctcttgc gtcttctagg tcaatcacta gggttaaatc tcatcactca 12720 accattgagg aggtactate tetgettaaa gaaacaggat tttggeeagg ettatgeetg 12780 taatcccagc actttgggag gctgaggcag gtgaatcacc tgaggtcagg agttcaggac 12840 cagcctggcc aatatggtga aaccccatct cttctaaaaa tacaaaaatt agccaggtgt 12900 ggtggtgcac acctgtagtc ccagctactt gggaggctga gacaggagaa tcacttgaac 12960 ctgggaggca gtggttgcag tgaaccaaga tcgtgccatt gcctgcctgg gggacacagc 13020 gagactccat ctcaaaaaac aaaaacaaaa acaaaaacaa aaaaaaggat gtttactaaa 13080 agaactgcag gacctgccta atagatacca ataaaaagct ggaagatgtg cctgctttgg 13140 gaagggaagg aacataggaa gaagggaaat ggaacatagg gatggagaag agaagagttg 13200 ttgataagga ggaagtetee tgagettetg caettaceat eetggeaaga acaettggag 13260 ctgggatggt tcagaggaca aaaggatcag tgtccaatca ggaggtagaa actacaccac 13320 taatttaaat agagatctaa tgtagtgtat tcttaagtag gtataaaatt attaagtagg 13380 taactgcaaa ggtaaaaaga gaatgctaag ttgtcacaaa gatagcaatg acaaaagcag 13440 ataccatgcc cacggctggt gaaacaaaat aagaagtgga attatcaaaa tttagaagct 13500 tacaagagaa gttccaagaa accaaaactc agatctctga ggaggaacac caaagtgttg 13560 gaaactggtg ctaggaagtg ttgggaaact gcaaactgga ttcagctgct gctaaggaaa 13620 gatgctgctg atgccagggt gaagaagcgt tgctagggtg atgctcacag gaacaggaag 13680 ctgacaggaa gtcaatagga agaagcaagt ccctccttcc tgatgctgcg acatcaattc 13740 cctcctgccc tcctcattgg caggcataac agggagcaac tggcaatgct ggaatgtgaa 13800 tttctgaacc ccagccccag cactacacaa gttgatacag aagggtggtt gtggcgctaa 13860 gaggtgacag cttaactact gacaagagtt acaataaaca atgtagaaat gtgtgaactg 13920 acataactgg agaaaggagt caaaagttca gaggagaaat gtattgccta aaaccaaaag 13980 accaccaget tagtagetta gtatgtttcc agtacacett caetggagea ataaagaatg 14040 agctcctgaa ggggcactga catcattgag caactcagtg gtggctgccc cttctatatt 14100 gtgttgtagc tgctagggaa ctggagttcc tactgtttct taatggtgac aataggattc 14160 cagaacagca gaggccaggt agcagcactt aaccatcaga cacatagtgt atggaattac 14220 cataatgggc agcaaagtca gaaactcaac caaggggccc ttacccacag agatctgtgg 14280 gattgctaat agaccatgaa gttcctaagg gcgagatcag tgggtgacta gcaagggtat 14340 tgctgcccaa tataataaaa acagatcaag agcatgtaat gtgaagactg aggtgagcca 14400 tcacagtgga aaatcactat ccctcaccca tttttcatgc ttaagctagt cctcagaccc 14460 agtaccacag taactgtaca caggagaaca aaaatatcca gatatttcta tagttgggga 14520 attcagagtc cggactgaca ctgattccag gggatccaaa ttgccactat agccctcctg 14580 ttaaagtaag gagatatgga ggcaagatga taaatggagt ctttgccaaa gcccatttta 14640 cagtgagtcc agtgggtctt cacaccetee tgtgactatt tteeceatee etgaataett 14700 aattgggatt agtaaactca gcaggcagta gaaacctcac atcggtttct taatctgtaa 14760 agaaactggt gagggtcacc caaagcagag gtgacaacag tatgtgtata tatatatatg 14820 tatatacgta tatatatata tatatatata tgctggaaag tgaatttctg aaccccagcc 14940 ccagcactac acaagttgat acagaagtgt ggttgcggcg ctaagaggca acagcttaac 15000 aactgacaag agttacaata aacgatgtag aatatatata tatgggggat caactgatta 15060 tatagccaga gtttcccatt gtaagttgtg tactgtcaga tccacccaac tgtatagtcg 15120 agtatgtgca acagtaatcc attgaagggt ggacatggaa cgttgtcatg aactaggcct 15180 gagcaggacc agaggtcaca aataaactac agaagcaggc ccagaatccc ctgttgtgat 15240 ccctgcattg gaacctctcc cctcagctca cacttaggaa atcatgagag attcctgatg 15300 accaggtgac agaggaggaa aaagcttagg cctggtttat ggacaggttg gcacaatagg 15360 ttagtggaaa acaaaaatgc actcttactg cactacagtc ccactcaagg gctcctgaag 15420 aacagccatg tggagaattt tttgcagggg cagaacttta ggcggtgcat tgagtcatca 15480 acttggtgca gaaagagtcg tggcctgagg tcaggaatcc caggcagtag tgaacagttc 15540 agctgattgc tcagggactc gtgaagagca agactgcaaa attgcagtta aggaggtctg 15600 gggaagaagc atgtggattg atctttgaga gaagacacaa aaatatgtgg gtctctgtct 15660 catttcattg tctaccagag ggtgtccatc gcagagaagg tgctgaacaa tcagttagat 15720 aggatgattc atccagtgga aatgagctta tctctctcct tagctgcccc agagcatgca 15780 caacagaccc ataactgaga agccatggta agagggatgg aagccacgca tggcccaaca 15840 gcatgggctt cctctggccg aggctgacct aggtattact actaagtgtc caatctgtca 15900 aagcacaggc agggctgagc tettgacatg gtaccacccc tcaaggaggg cacccagcca 15960 catggtgcca gttgattaca ctggacccaa ccacctgga ggtgctgtga ctcttctatg 16020 acttcatggg actgatacag atttgccttc tctgtccaca atgtcatgat cagcagcact 16080 ctctcagagt tcccagggtg tgcagtttat catcaaagca ttcccccata acatggccat 16140 ggagaaagtg agcacatgac catgttattc actggtcctg ctatttacca taccaaccag 16200 ggctgcatcc tgagaaaatg ctggaataac cacttgaagg catagctaag tcatcagctt 16260 gaagataggg ttgagaacct gtccttacat gtttgtttgt ttgtttgttt gttttgagat 16320 gaagteteat tetgttgeee aggetggagt geagtggeae aatetettae tteaacetet 16380 gcctcctggg ttcaagggat tctcttgcct cagcctcccg agtagctggg attacaggca 16440 accgccacca cccccggcta atttttgtat ttttagtaga gacggggttt caccatgttg 16500 gtcaggctgg tctcaaactc ctgacttcgt gatctgcccg tctcggcctc ccaaagtgct 16560 gggattacag gcgtgagcca tcacaccctg cctcccttac atgtatttct atacttgaga 16620 caatagctat tgtaagggtg ctacatcccc aacagtcaga atacataggt ctggaagcca 16680 agaaatgagt ggcctctctc acctttattc ccaatgaccc acttggcaaa tttatgcttt 16740 ctattgccaa agctttaggc tctgttgaac cagagatcct agttctcaga gggtagggag 16800 agatcactte taccagagga cataattgtg gttttactaa acctaaaatt atatetgeet 16860 ctggtaattt tgggatcctc atgacagcag accagcaagc taagaaagga gattctgaac 16920 aggcaggagt aagtgacccc tgctggacca ggtgaggggc atctagaaag ggtagtagag 16980 teggaagetg ageateagtt acaetttagg accaactaca geagtggggt etggagattg 17040 tecetectet tatetgttat cetttetace tetteetett cettettete etetettett 17100 gtaacaaatc gtgactttcc accacccaaa gaagcagtga cagaacatga aacttaatat 17160 gaatgcaagt ttatctgagc aggtgcaagg gtgaactgtg acacatactg tcaatgccct 17220 gccattgtcc ctcaaacctg tcaatgtatt cccaagactt ccaactgcca gcatccacat 17280 ggtagctaag ggatcatttt cccagaacta cagagagctg actgtacaca tcacagttca 17340 caagtgccaa agaattaaac accaccaggg agcagcctca acactcaaac atggtgtata 17400 aataccccag ctccctcacc ctttgggtgg gatgcttctg aggcatcgat cattctgagg 17460 ttttgtacca tttcccagag tttccctgca ggataaatct tcagttcccc tttgtgataa 17520 tagtgcaccc ttatggggct gccttccctt ccctgtatca ccttcccact tccctattag 17580

tgttacttat gctccccaaa taaactattt tcactttagt ccttatctta aggtcagttc 17640 ttggaagaac ccatgctaag acacatgtgg ctcaaggact atgcattgag aagccctaat 17700 ttagagagtg aactcatttc tatttttaa aaatatcttt ctccctctct cccctgactc 17760 cccttctcct tacccctaca cccgagtttg tgtgtgcaca catgtgcaca catatataga 17820 atatatgaaa aagatctgag gatatgatcc aagtattaac aatagttctt tctgaatggt 17880 ggcttcttag ttttcctctc ttttgttttt ctacagcagc aactgtgtct ccgaaagtat 17940 ttttaattgg caattaggag atgatgagtg gagtggtggg ggagcagagc caggctgcag 18000 tgggctgatg ctggcccaag aggatgcaca ggccacagtg ggctgatgct ggcacaggag 18060 gatgtgcagg ctgcagtggg ctggtgctgg cccaggagga tgtgcaggct gcagtgggct 18120 qqtcctqqcc caqqaqqatq tqcaqqctqc aqaqqqctqc cctqqcccaq qagqatqtqc 18180 aggetgeaga gggetggtee tggeecagga ggatgtgeag getgeagtgg getgetgetg 18240 gcccaggagg atgcgcaggc tgcaatgggc tgatggtgac gcaggaggat gtacagacaa 18300 ttctctcaaa gtgctgggct agagacaggc aagaaatgag gtggtagctc aaggtggggc 18360 aactgtagag agtatcattt gaataggaag ttgagcctgt ttctaggctg aggaaaagca 18420 gccaatgaca aggaaggaga caaaaataca gagtcaaaag tgggctcatt gaaggagtca 18480 gttcccagaa gaggcctgag tggattcaag gggccctagg ggaggaatcc attctcaaca 18540 gaaggtgagc ttcatcctct gggaccaggg aaagggggtg aagatgaata atgttagaaa 18600 tgcatttatt tcagtcattt ttttgttcta ctctctgctt catttcacag agtacttgag 18660 gtgtttctat agataagttg ataggttgga gggactggaa gttgggacat ccccacggag 18720 ggggctccac ttcccccatg gagcaggagg caaggtcccc cactgagagg aagcaggggt 18780 gtctctgtgg ggttacagga gccaggcaaa ggtttggaat agggaggagg cactgagcga 18840 cagageeeag ettgeeeatt tataaagtet getaggtgga getgaeeget eagetgtgge 18900 ccagccagcc tgcacaatgt ggagtcatct ccagctgctt gggccccagg caagaatcac 18960 aggaggagga gcctgtgccg cttacttgtc ctggttttag ataagtcact tccccactcc 19020 cagccacagt ttcctcatct gccaatgggg agaaacaagt caaatctgga gatttgatcc 19080 tattgtgagg atcaaatcaa ataacacaca tgaagcacct agcacagtgc gtggcactcg 19140 gaagttgctc aatgttcctt cttctgctcc tctgccttca agtgggcttg agcaaatgta 19200 acctggatag gaagggacgt ggatgttgta tcttgtattg gtggatgctg ttacatgcaa 19260 caattttaaa tacagccgac tctcattact ctctgtagcc cttaaaagag ctatggcatc 19320 aggeteetgt gagtetetgg ceacattttt ageaaceagt caacatacaa cattgtttta 19380 tttatttatt tatttagaca tggagtttcg ctctattgcc caggctgcag tgcagtggtg 19440 caatctcagc tcactgcaac ctccacttcc tgggttcagg tgattctcgt gcctcaacct 19500 cacaagtagc tggaattaca agcacccgcc accacgccca gctaattttt gttttttagt 19560 agagatgggg gtttcaccat gttggccagg ctggtctcaa actcctgacc gcaggtgatc 19620 ctcctgcctt agcctcccaa aatgctggga ttacaggagt gagccactgg acccagccac 19680 aactttgttt tatgtgtgtt tctgcttaga gacccttatt taatatataa attgttgatt 19740 cactagcact gaactcacag ccaacactac tgtaactcat gtctgaacaa agcttatcaa 19800 gcacacgtat tttctcctta aggcacatca cagccttctt gtgcttgaga acaccagaga 19860 gcacttcagc acaatgcttg gggccatttt aaatagcaaa atcaccaaca aaaaggcaca 19920 aaaaatgaga acggttcgca acaaataagt cacaaaaaga atacttgttt acactatgac 19980 agctgagaca agaaggcagg gtgtcccttt gttcaccttc agctgggaac atatgtgtgg 20040 gtaagtcaag attttcacca ctgtacataa gtatgtccac aaataatagc aattgtgcct 20100 caagtattga tttgaaggtt acaaataaat tttagaagta ggtgattttg caaatatgga 20160 atccataaat aatgaggatc aattttcttt attttttctg attacaaaaa tatatataat 20220 aaacagagct atctaatgta aaagttaaag tcccccataa tcccagccca caaatgaaca 20280 caattagaat atagttctat agaatttttg ttatgcaaat aatgcctgtg attgtgtcta 20340 agtetgtggg tgtetatgtg teagtgtatt tgggtettte ttttettttt eteacteaac 20400 aatagctctt ggatagcttt ccagaaaaaa aaaattcctg atgttaattt ctggagtatg 20460

aatggaagca gatggcatac actgcagtca ggatctctaa gtcttagttc agaccactca 20520 accacatcag atgtggagag agcaatgact tgccaaatgt aaagataatc aacagtttta 20580 gtgttctgca tcttaatgga gatggaataa ggtcaagaga agaactgctc agaggataaa 20640 aggactgaac actgggaagt aaagtgaaag agaagagact gggtcgggca cggtggctca 20700 cacctataat cccagcactc tgggaggcca aggcaggcag atcacttgag gtcaggagtt 20760 tgagaccage etggeeaaca tggtgaaace eestetetae taaaaataca aaaattaget 20820 tggcgtggtg gcgggcacct gtaatcccag ctactcggga ggctgaagca caagaattgc 20880 ttgaggctgg gaggtggagg ttgcagtgag ccaagattgc accacttcac tccagcctgg 20940 gcaacagagc aagactccat ctcaaaagaa aaaaaaaaga gtctgtgact ttcagccaga 21000 qaaaaccaca ttctgtgtcc tttggaggag attagaccta catattaaga ctatctactg 21060 aaaggattta gacaatagag taaaatagta ccagagcctc ttctaaaaac agctgcaaaa 21120 ttggctgggc gcagtggctc atgcctgtat tcccagcact ttgggaggca gaggcggttg 21180 gatgacctga ggtcaggagt ttgagaccag cctgaccaat atggtgaaac cctgtcttta 21240 ctaaaaatac aaaaattagc caggcatggt ggtatgcgcc tgtagtccca gctactaggg 21300 aggctgagat aggagaatca cttggacctg ggaggcagag gttgcagtga gccaagatca 21360 tgccactgtg ctccagccag ggtgacagag cgagactcca tctcaaataa ataaataata 21420 aaaacagctg caaaatagta tggagaaagc tgggctgctg caacaaaaga cccaaaatac 21480 aatggctctt agaaaataag tttacttctc actctgtagt ccatgtcagg gtggctgtac 21540 ttcatgcagt cattcaggaa cccaggatcc tcccatatct ttgctccatc agcccttttg 21600 aagcattatt gaagctgtgt ccctggtaca tctatgttcc aactcaagag aagagaaaat 21660 qgaqcatqqq aqaqcaaaaq cttcatqcct taaqqtctat ttctatttat qttctattaq 21720 aaagatttta gtcaccaagt ctcactcggc tgcaagaaca gctgggatgt atgatctcta 21780 qtqqaccaqc cattcctccq actqctactc tactacataq aaqaacagga ggatgaagtt 21840 tagtggacag ctagcaattt ccatcacatc tcctttattt gagccttggt atcttcctct 21900 ataaaacqqq qataataata taaactaqtt aaqqctqctt tqqqactqaa atccaataat 21960 atatgtgaga atgcttagca agccctactg tgcctgataa gaatttctca ttgattttgc 22020 cctctagact gccagctcct tgggagcaag gagcatagtt tattccacct cctcacaaag 22080 acctgcttqq agtcagcatc agtaaataca tgttgaataa tgaagtcact gtttcatcca 22140 tcatcaaqcc ttttttttt tttcatttca tttcaaatqc ttcaataatt tagactctgc 22200 cctqttcact ttccccaccc cctcattagg gqtgcacqtc agtatatcag ttgggattct 22260 ctgggttgca aagtgacaat gcactactgt taaactggct tatgcaataa gatggaccat 22320 ctcacatate etgaagteca gactetgeat cagaataaaa gettetette eetaggacte 22380 tettggeett geeeteeett etgtatttge tgeateetea gaetgggage aagatggetg 22440 ttgcaattcc aagcattgcc accaaacata tcccagcaaa gggggcagac tgttttgcaa 22500 agtaaagaga ccatttcctg aaaacccctc tctgccatag gcttcccctt tagtttttca 22560 ggctggacct gcccaaactg tcactggcaa gaggaatgag accaccataa tggacttgga 22620 ccaaacaaga ctcactccat gagaccacca taatggactt ggaccaaaca agactcactc 22680 ctggaaatgg gctggggtca gccttccttg ggtcacttgg ggaagggggc cacctgacca 22740 aaatcagggc tctgcccata agaaaatgtt gagaaactgc tgttgcatga gcaaccaact 22800 atttttctcg caatgatgga gattctgggc cagatgaggg tgtgatggag aaagtgttaa 22860 ccatagagaa ctaaactgag agctttttca taaactgtac ctcaataaag tttaacacca 22920 atgaagatat ttctggagga ggcagaaact ggtagccacc ctctatggct catttccctc 22980 accoccgtat ccaaccatca ccaaatgtca ccgtgtctgt acttgcaata ccctagtctt 23040 ctctccttac ccactgctga ggccccagtt cgggtctcac ctcctgcagg cacgatgaca 23100 acagcacctt aggggtgccc agtctttcct tcctcctgca acccagggcg ttgatgcggt 23160 tattcagcta cacaccttta ctgtgtgctg agtgctgtgc atccgcagac acattggaaa 23220 agctccctgt cttcttcacc ttgcagatgg tataatgatt atctccaaga cttcctgaaa 23280 cccaatcgga ccaggicatt cccttgcctg aaagccccat gccttcaaga aattctttac 23340

cagaattact agcacttcct tcactgcgcc ctcccctttc acgcctctat gcttttgcac 23460 aggetgtete etetgeetag aaateeetta teeeetetee atetggeaca caagacaagt 23520 totoctatta ottittotoc ototococtg otocaccoct cacegootta cacacacaca 23580 cacacacaca cacacaca aatacagcac tccagaattg tttgccaatg gaggcagcct 23640 ccggggccag atgttagcca gggctttcca aacttctccc caagcactcc ttaagaaagt 23700 gaagaggaaa tgggacccca gggcttagga gtgtgagggc cttgaactcg ctctaagcaa 23760 gcagggcatt tcaagagttt tatctttata ttttatgcag aagttgtatt ccaaatatat 23820 tettgttegt titaatacaa aatatgatti titetacate tieaaatega tgateeagaa 23880 agatgeteet tgtttatttg ttgtgetete aaattagetg etcegeeteg eegeggggae 23940 cctaagcgag acctggatgc agttccaagt acacaccccg aaggaacagc tgggcttcgc 24000 ttccctggga gctggaggat ggtgggggtg gggcggggtc aaccggctgg tggccccgcc 24060 ctcccccgcc cgctgcgggg gcggagttgc ttgggtcccg ccccgggggc ggggaggcag 24120 ccgcggccac cggcagctcg gattcggctg gttccgggtt gagaggctgc gctggaccga 24180 ageggtgget getaageteg egggggtaag gggtegeget gggeeagggt ttggggeegg 24240 gateeggeag etgageggge eggeaceet cetettetet geeggteaca geeaatgtae 24300 ggeteggeet ggetgeece teecceagga tteeccatee ceagettete geecteeceg 24360 caccgcccc acccgggat ttcgacccc ttaagggctc cacccgctc cgggatcccc 24420 ttotoccago tootatocot taggaotgoo cogococota gaacotocoo gtoaggatot 24480 ccgtccctca gccgctcaca gcctcctccc agcgcccatc gccttgagct gcccactacc 24540 tetagaetge ceteceggge tggegteeca eggagtetea geegegeaee cetteetege 24600 gttaccetce tteeggacag cacceetce etteteeggt ageteetace eetgeetgtg 24660 egggeetegt eccegegeee ageceteggt getgeeteeg acagegeege geteteteag 24720 ecgececet egeceteggg eccecetete tgetgeceet gggeeatgge gtgeageete 24780 aaggacgage tgetgtgete catetgeetg ageatetace aggaceeggt gageetggge 24840 tgcgagcact acttctgccg ccgctgcatc acggagcact gggtgcggca ggaggc3cag 24900 ggcgcccgcg actgccccga gtgccggcgc acgttcgccg agcccgcgct ggcgcccagc 24960 ctcaagetgg ccaacategt ggagegetae ageteettee egetggaege cateeteaac 25020 gegegeegeg eegegegaee etgeeaggeg eacgacaagg teaagetett etgeeteaeg 25080 gaccgcgcgc ttctctgctt cttctgcgac gagcctgcac tgcacgagca gcatcaggtc 25140 accggcatcg acgacgcctt cgacgagctg caggtgcgct acccggcctg cctggggaag 25200 gggcggggcc gggctggagg tggggccggg cggggggtgg ggtcagggct ggaccgcggg 25260 ccaggcccag tcagaatggt cctggggcgg ggccgccagc agggtcaggg ccctatcagg 25320 agtaacgegg ggcagggagg ggcggggceg cegcatggeg gggcegtggg ggcggggeet 25380 tgggcagtcc ggaccctgag ggatctgaga cagacctgga gtaccggctg gtccgcggtt 25440 agggagaagt cggggatgcg gatgggatgg cggaaacaag tgagatcaga actggaccag 25500 atactgggct ggggcagggt tgtggacgaa ccggaatcag agttgggcaa aggcagggcc 25560 actgtcagac tgagggcgag gtcgcgagga tgggtctgta ttaaaccggg tagctgagct 25620 ctggcaggct gggggttctg tgggggcgga gactggatca gatgtgcatc aggactaaga 25680 ggagtacggg ggctagaatg tgctggacag gtgagggtga aacctaatag agtggtataa 25740 gttagggtgc caaagtgctg agagggcagg tttgagtacc gagggttagg ccaaggtgta 25800 tgaggggtta agactgagat caggtccaga tactctacaa caagtttaga tttaagccag 25860 agtagaggcc aggttgagtg gggccaggac ttaaaggtaa agatttggag aataaggccc 25920 agatgtaagg tgattcaaga agggaggggc tagacctcta ggagtctcta gaggtttttg 25980 atgacetett tggetetgte eeccacatea ggaettttga agaetaagtg aaaeggtaca 26040 tgcagagtga cetgageata gttggeatag aactetaate ggteteeett aagaetteet 26100 gtcttcactg acaaactcct actcaacttt taaggccttg ctcaaatatc ctctccgtga 26160 agcettetee aagtteeact ggteaaacaa acaaacaaac aaacaaaaac attagaactg 26220

catttcccca aatgctctct attaataagt gtgggaaata tagtatattt tttataccca 26280 cccccttgga gaattttcag tgtgcatttg catattaaaa gcttagagaa attttgttgc 26340 aaataaatct attttactgt gtttaataaa atggttccca agcttacttg ggcctggaat 26400 cctttttca agctaaatca cttaaatcca gcagccccat gtacctggct ttgggatact 26460 agtcgagcac gtagttctcc aaggccagag acagaatctt atttctccta tctatggccc 26520 caaagcctgg tgcaaggcct ggcccacagt acacaccaat aaaggccaaa tgaatgaacg 26580 aaagaatgac caaccctggc ctaagctgga ccacactgtg gagcgtttgg aagcagaagg 26640 tttttggctc aaacatttta tgaaaatgga gtgggctaac ttgggaggta atgagctctc 26700 tggcctcgag atactcaaac agaaactaaa taattacttt cccctgtatt gtaggggctc 26760 ccaacccctc cacacactag tetttgagta ggcetgeacc cageagatge ccatgggeet 26820 caggagaaat ggcccatgtt caccatcgct ccttccctgt cccttttatc tcaaaactac 26880 aactgactcc cttccagtct agctgtctga ggatgaaggc cccatcagag ggtgagcaag 26940 ggcctgggcc tctgggagcc tgcacaaggc ttggccctcc acccccagag ccatcgtgct 27000 aggegetget getgtecate teccegteta tggagteaca taageaggaa gagtttgagg 27060 ggactctgtc tgaaaccatc tgtccaacct cttcatcatg taggaatgga aagtgaggcc 27120 tggagaagtt atgtgacttg cccaaggcca caattccaga cagtgagaga gccagggcta 27180 tagggcacag cctgacccag atccctcttc tctgatctct cccctccttg tctgaccttc 27240 tagcctctgc ttcagagcct tggttctcct gtctgcaaac caggaaatcc aaattactgt 27300 atgttgggct tctgtactct atcccatgac ctgggggaca caggagaaat tgaacatgta 27360 ttacctacaa atattattga aatgcttcat tattgggtga aaagtaaaac aggactgcca 27420 cttgcttact ctctagtgca ctgtcgtggg gttggacata cttgggttcc aaacctgctg 27480 tgggcactgt gtgcaccttg gtgagtcact tcatgtaaac gctgatgctc tgtctgtaca 27540 atggggtcag gatgetteet teetaceagg aettttgtga agetgaeetg ggattaaeet 27600 gctatttgag gttcaaaggc acacagtacg ggctggaata acatacagcc caccttttct 27660 ctttctgcct gtgagagete atgtgeccag etgagtgaat geccagaete teetetetgg 27720sccgagaagg aggeettget ttagtgtgte etetgggett ggeaatttgg tggeagagaa 27780 atctgcctcc catctagaga ggatgtgctg ctgggtgaga ttcaaggcac cctccacccc 27840 acctgcctct ccctccatat ggggaaggca aggcttatta gctatttatg cagcagaaat 27900 aaggetgaac ceaeceteae ateceettet eteceageag etgatggage tggggeeett 27960 ctgcagaatt acagactcag agccatgcag atgatctggt gccacatcca cttgacagat 28020 ggggaaacag gagaggaga gggaggaagg gaacttgcct aaggcctcga agccagagga 28080 agetgggeet atactcaget ggagtetece aacaccetae etageagttg gegtgeaget 28140 tttacattta ttataaatcc ttgaggcatc agagcagaga aattaagagc cctgctttgt 28200 acccaggtaa teteaateet ggetetaeea titaetgtgt gaetttggga agattattta 28260 ccatctctga gccttgggtc cttcatggac agcatggaag taattatatt aggattaaac 28320 aagatgatgt ttataaaaac ttagtactgc acttggcacc taacagcact caataaatga 28380 cagctatagt aggttacatc gtactcggca ttattgacat ttgggggctag ataaccgttg 28440 tgcagggcca tcttgtgtgt tataggaagt ctggtagcat tcctggcctc tacccattag 28500 atgccagtag caaactccac ccacccgca agttgtgaca atcaaaacca tctccaagca 28560 ttgacaaatg tctcctagag tcaaaatcac ctctagttga gaaacctgac ctagaaaagt 28620 cccactgaac tttaaaactt caggtcaaat atcacctcct ctgtgaagcc ttccctgacc 28680 tactaagcac aattgctttg tactccagat tacatcacag gggtcagatc ctgacatgct 28740 gtgtgtcctt ggtcacgtca ctttgcttct ctaaggctcc ttctctaagg ttcatctata 28800 acaaqaqqat atqatqttcc tgggaaggat gttgtaaggg ttagggatcc tttatcagaa 28860 gtgcctagta ctgtgcctgg catagtaggc accccaaaac tatttttaaa tgtctttatt 28920 ctgattataa aattaacata agaagcagag ctgtataatg taaaagttaa agtcccccca 28980 taataatacc ccatgaaaca tggcaggagt tactatacag ttctaaggat ttttatgtaa 29040 cctgtgggtg tgcatgtgca tgtgtgtgca tgcgtacatg catgtgtgtg tgcatgtgtg 29100

tgcatgtgtg catgcatgtg tgtgcatgtg tgtgtgtgtg catgtgtgtg tgtgcatgtg 29160 tatgtgtgtt ggtgtcttcc tccccacctc cactgctgag tacctggacc actgagcaaa 29220 gtggagggaa ggagcccatt tccaaagagt tcagggcttc tcagccaata ttcatcgagc 29280 ccagtctgaa tgcctgggac tgcactaagg gcttttcttg cattacctca tttaatcttc 29340 atagcaccct gtgggatggg tattgttatc tatttcttct actgatgaag aaacagactc 29400 agaggaatta agtgactcat ttggtcacgc agctggtaaa tggcagggcc aggattggaa 29460 gccagtctga ctaggccaca tatcgtccct gagctacctc tgagggctgg gtaattgtct 29520 cccagccacc ctgcctgtcc tgtattgaca gggctaggcc atctgtgcca gctgacgccc 29580 cgagggcagg tggttgggac gtcatcttgg tcagagcaga cgtggcatcc ggctctctgg 29640 ccatctcagg ttcctaaccc ccagagaggg gatccgattc agtctcagcc gcccctcca 29700 ggcctcatgt gaccattgga gcccttccca aggcttcctt catgccagag aagacagcag 29760 tggatcagcc ttggacgcaa gccctggtag gcagggtatg gtgatccagt gacaccaagg 29820 cagccaccca aggagggagg gggctggggg ctaggttcaa atctcggctc tggtttcttc 29880 caggagaggg ggtgacaccc tcttacccaa tctgagaaat ggaagtaaga actagccctc 29940 ctgctttctg tataaagaga gagaaagagt tgctaaatat ccaaagaaat gagagattca 30000 gaggcacttt attttgtagc atggacagga aggcagctgg gttgtctgtg ttgtggggaa 30060 gtggctctgc tgttactttt ccaaggagag ggcaggattt ctatgccaac agcagcctct 30120 gtgagggcaa agctggctgt gggtcaaact cagagctggc cgctggcatc tccacatccc 30180 tetteacagg tgtetgggea geeaggatae etttgetgag eaegggeeae agtgtagaag 30240 agggactaac aatgatgaaa caatgactct ataaaattat agcccaagtt ttggaggcac 30360 aaagtaagtt atggggcact tactgtgtgc caggtgctgt gttataggca tttgattctc 30420 acaaggattt tttcgttccc tactccctga gtgggactga gatcagtacc atctcacaga 30480 tgaagaaaat gaggctgaga gattcagtaa ccttcccaag atcacactgc aagtaggagg 30540 aagagetgag atteaaagtg gtetttetga eteagaatte acceteette eeaacaegee 30600 aactgtccca gggagcacca aatggggagg aacctgagaa accatctggt tgacacgctc 30660 cccattttgc agatggggaa actgccttgc ccagggttag accagagctc agctctcccg 30720 actcagtcca gtgttgtttt cccagtacca tttaccttcc tgacctccat ctctgcttga 30780 acactcagag ggatgaggca gatttggagg tgagttctgt cttggattca gggattcctt 30840 taataatttc tgggctgggc gcagtggccc acgcctgtaa tcccagcact tcaggaggcc 30900 aaggcaggcg gatcacctga gtttgagatc agcctggcca acattatgaa acccccatct 30960 ctactaaaaa tacaaaaaaa aaaaaaatta gctgggcatt cgtggcacac acctataatc 31020 ccagctactc gggaggctga ggcacgagaa tcgcttgaac cgggaggcag aggttgcagt 31080 gagetgagat tgttecacta etetecagee tgggtgacag agtgagaete catettaaaa 31140 aaaatacata tacatataca tatacatata catatacata tacatataca tatacatata 31200 catatacata taaatacatg tgtgtgtgca tatatatgta tatgtgtgta tatatatata 31260 tatacacaca tatatgtatg tgtgtgtgtg tatatatata tatatacaca cacacataat 31320 ttotttagcc agtatotgtg coatggotac agagggocag cootgtgttg ggoccaggag 31380 agaactacac aagacctggc cctgtgtggt cccgaaagat aggcccataa actggtaggt 31440 tgctgtaact gaggcttgct ctgttgagct gaatcctaaa agatacgctg agtacttcag 31500 gccagggagc agaaagaaag atgttatgga cagagggaac aaaaacatgc acagcctggt 31560 gcagattgtt ccacggactg ggttcaaggc tttgacaggc agtcatgctc tccttctctc 31620 tctctccccc agcctacctc tcatttaatt ctaacagtaa ccctatgaga tggatctcat 31680 tgccccattt tataaatgga gaaactgagg ctcagaaact gtgcctagct gggcacagta 31740 gctcacacct gtaactccag tactttgaga ggtcaaggca agaggattgc ttgagcccag 31800 aagttcgaga ccagtgtggg caacatggca aaaccctatc tctataaaaa atgcaaaaaa 31860 attagctggg catggtttca tgcacctgta gtcccagcta tttgggaggc tgaggtggga 31920 ggatcacttg agcccaggag gttgaaactg cagtgagctg tgatggtgcc actgcactcc 31980 agccagcctg ggcaacagag tgagaccctg tctcaaaaaa ccaaaaagga aaaacagaaa 32040 aagaatataa atgtatttac tacctctgaa ttgtacacct aaaaatggta aagatgataa 32160 ggtatatatg tatattttac ctcaataaaa ttttttttaa aaagaggcta agcacagtgg 32220 cttatgcttc taatcccagc tcttgggagg ccaaggtggg aggatcattt gaggccagaa 32280 gctaggagtt cgagaccatc ctgggcaaca cagagagacc ccatctctac aataaatttt 32340 taaaaattat ccaggcatga tgcatgcctg tagtgtgagg tacttgggag gctgaggcag 32400 gaggattact tgagccccag gagtttgagg ctatagtgag ctatgattgc accactgcac 32460 ttcagcctag gtgatagagt gagcccttgt ctctaaaaaa attttttta attagggaaa 32520 aaaaaaaaaa gaaagaaact gtgcttaagg tcagaaaacc actaagtgtc cctgaagctg 32580 aaacttgaac tcaggttatc tgagtgtgac cagggacagg catggaggtg agcacacatg 32640 tgttcaggtg gttcgttgtg gctagagggg agggtgtggc aggaggaggt aagaatggaa 32700 aagcaaggct tgaccagctc aggaagggct ttgaatgctt gaatgtgcac atacatgcac 32760 acacacacat acacacatac acatgcatgc gcacacaagc tcacacacac acatgcacgc 32820 acccattgag cttgatcctt acttaacatg ctaggaagcc agaaacaaat gtgagcaggc 32880 aagtgcagcc cggccaggtc tgcattatgg accaagcact gtggggcagt gtgccagggg 32940 agctggtggg agaccctaga agcagggact ggccagatgt tgccagagat tgtgtggctc 33000 agaagtgcac agggagggtt ggggctcaaa gatataaaat aattccagtc tgttgggagg 33060 accaggagca tccagttcta ggtatagatg aaggattggg gttgggggag gaaagggaga 33120 ggcaagttca agtttgtcac ggtcaggttt ctggcatcct tgggtcagag agggaaagag 33180 agagcagtac ccagacatgg agaagaggag aggcttgagc acctattgtg tgcagcgcca 33240 tgctgggccg tgtcataggt gccatctcac tttagccttc atcacaacac tgtgaaagct 33300 tgcggaggtg agccctgagc gaaagtcatg ctgtcaggat ttgaacacag gcttttctga 33360 tgaagagtcc ctgaagccag agctgagatg gctttccaca gctgctttgt cccctggacc 33420 agagggaggg atggcctcac agcaggagag atctggcctt gggaacattt gagccctgcc 33480 tetetgtgee ecceaactee tetgttgeee eagteetgge ttetteatae eaataaagag 33540 ccccagagcc tcaaagctgg catatttgca taactgtgtg ctcagggctg cgcagactcc 33600 acagececae cetetgaggt gtgteeteee caeteaeete ateetgeeet geeeaeeeee 33660 geteegatgg ggeeetgtgg aateeaacte teecaggetg acatteaagg ceteeteeag 33720 tgcccaccc taccctaget agecccaget ggcettteca gettgtgaet ceacceacet 33780 gtcacatgcc tggctgcagc catccccaac caccccgact tcctgcacac gtgagggtgg 33840 geoectacee aacetgitet eeccacetge aatgeeetgg eecateetgg agaetigaag 33900 gaaccetgge catecatett cetttgteet tecateagaa acaaacteet teettgaage 33960 tccccccgtt ctgagtccca actttacata tagttactat gatgataatg acaactaaga 34020 ttgattgagc tcaccctgta cgtcatgtca ggtcatgaat taagtcattt cattcccaga 34080 gcaagcctat ggagcaggtg ctgttaggcc ttacttaata gatttgaggt ccggtgccat 34140 ggctgatgcc tgtaatcaca gcactttggg aggccaaggt aggcagatca cttgaggtca 34200 ggagttcaag accagcctga ccaacatggt gaaaccccat ctctactaaa aatacaaaaa 34260 ttagccaggc gtggtgtcgg gcgcctataa tcccagctac tcaggaggct gaggcaggag 34320 tatcacttga acctgggagg cagaggttgt agtgagccaa gatcgcacca ctacacccca 34380 gactgggtta cagagcgaga ttctgtctca aaaaaataaa aaataaaaat aagaccttac 34440 tttacagatt tggaaaccaa ggtggaggga gggtgctgtg agcacagcca ggtgttgtca 34500 gctgttctgg atcctagcag gccctccatg tttatcctgt tcttctttgt attttaccta 34560 ttcaagtttc ttcctcatcg actaactgca aatttttcaa ggaccatgta taggcccacc 34620 cctggagcgg ccagcacaaa gcctgacact cattgggtac tcagaaattt ttgctgcatt 34680 gatttgcatg ggaggtaggg aggccaagag attttgaaca tggattttcg gagccactga 34740 gageeteece tetgeetett actagetgtg tgaacttagg caagetgeet aaceteactg 34800 agceteaatt tececetetg tgagatggae geaataaaga eactaetaae ettgtggatt 34860 gttgtgagaa ttaggtgaca agatgcctgt gaaattcaaa cccaaaccac atccgcctcc 34920 agecectetg gteetgggte tetgeegtta ceagtgteet teeteagggt taagetgtat 34980 cacttgagag tttatcaggc tccagtttcc tgtgtgacct ctctgctgga gtaaaatttc 35040 tagtttgttc tcctgtgtca agctgtgtgg ccgtgggcca gtcagtccct tcccttgggc 35100 ctgtgtttcc tgtcctggca atccaagggg ttggaccaga tggtccctgc agtctcttcc 35160 tgctctggcc atctgagaag ggaaggaggg gccacctgga cacagtgagg gatgaagaca 35220 caaagaagcg actagggagc cgcatacggg acacagtgac cgctctgtct cccgagcacc 35280 cagggtgtgc caggctctgt gccctgtgag gctgaacact tcttaccatt gtctcacttt 35340 atcctcccaa ccctaggaga tatgattatc cccatttttc agacaaggca ctggggcaca 35400 qaqaqqttaq qtqacatcct agggtcacac agcccaatgg gtggtagagc cagtcttcta 35460 accaaggaag gagacacgtt ggagcgggag gggtgacaca gctcaggcag ccttctaagt 35520 cctaccttct ggactctagg gtttggtttt cctaagttag ctgtttcttt gggctctgca 35580 ggtgaactct gactcagcct agcctcatcc ttgggcaggg acatcctgaa gactcagcga 35700 ggccaggggt gtgtggccgt gtcctaggta ctgagattgt gaaaatctcc cctttccaca 35760 gtccttgccc tcaagagccc ataatctagt gggggagatt tttgttgttg ttgttttaaa 35820 gatggggtct cgctctgtca cccaggctgg aatgtacaat ctagtagggg agattttttt 35880 ttttttaaag agactgggct gtgtcaccca ggctggagtg cagtggcacg atcttggctc 35940 actgcaacct cctgggttaa agcgattctt gctcctcagc ctcccaagta gctggaatta 36000 caggcatcca ccaccatgcc cggctaattt ttgtattttt agtagagacg gggttttgcc 36060 atgttggcca ggctggtttt gaacttctga ccttaggtga tccaaaggtc tcagcctcag 36120 cctcccaaag ggttgggatt acaggtgtga gccactgtgc ccggcctagt aggggagatt 36180 gacaggtaac cttgcaatta aaatgcagtg tgtgccatca gggtacaagt gtgggacact 36240 gtgcatgcag agtttgagac atgtactccc aggggaggtg acatttgatc tgggtcttga 36300 gagatgtgta aaggeetgga gageeetgeg agetgeteag tgtgtetgea geagtaetgt 36360 ccactagaac tetetggtag aacgggeagt tetgtgtetg caetgtetga tacageagee 36420 caggtggctg gcaagcactt gaaatgtggc cagtgcaacc gaggagctga attttccatt 36480 ttatttcatt ttaattaatt gcaatttaaa tagccacgtg tgtcgtattg aacagcacac 36540 gtctggacca agagctagga ctggagaaga aaaggttggg gccagcagta gagccttgaa 36600 tgtcacccta aggctttgtg cctttcttcc cagacaatgt ggaaatctgc agactggcac 36660 aatggggaga gtgagagggg gaagcattta tacatctgcc ctttagaaca atcactgcag 36720 ctgctgtgca gggcacttgg agcagcagga gagctagagg cagggaggag cctggggcca 36780 cagcccagaa aagaagtgat aaaaaccgaa ccagaggcag cacgcataga gaggagagaa 36840 caaattccag agcaaaccta gtgactggat tggtttggag gcggtaggaa tcaaggatga 36900 ctctcactcc gaggtttctg gctgggatgg agttagggga ggggtgccct tcactgagat 36960 ggggaatatg gggagaggag caagtttggg atctcctaac acgatcgcag cattccccat 37020 gatgtaagtg tetgtgteee tgaetgteae eecaacacat geacacetea tggeateaeg 37080 tttaggactc acacctcatc tctccccatc cttgacacag caccatgtgg ggcccaaggt 37140 ctcaacacat gtttgtggaa tgggcaaatg agtgttctga ttctcccgga tccaggagga 37200 aggagcaagc ccgctgtcct tattccctga ctgcaaaatc agggaggaaa tgtccaggtt 37260 teteaagtge eetgageaat gtgaggaagg eagaeteeaa ggeagtttet eagaaateet 37320 gaagagetge etgggtgget gggtettetg tggaeecatg ggggeeaeca gggggagaat 37380 tgtagcactt ggcccatctc ctcaacatct gcctctcagc cacactgtgt cccaggctgg 37440 atageceaag getgteagag geacetgagg ageggtettt etaetetett aggeaaacaa 37500 gatteetetg eteegaggae tgtateeget eaagetgeae aegaatgtta ggaatgaett 37560 tcagctgtta gtaacagagc cctggctgaa gtagctgcag tcagatgggg tgcgtttctc 37620 tctcatgtaa gacaagtctc taggaaagga ctccaggtgg gtgtgctgcg gcaggttgca 37680 ctggctcctg agagctgatt gtgtgcatct catcccaatg ccaagtccaa ctactacttc 37740

acactgatag cttgaaatcc acttgagtgg gaacatttac accatggaaa ttggcactgt 37800 tggggattta aaaaaaaaa gtttttctca gacagccagc ttcctagcat gtcactgagt 37860 aaaccgatgg tgtggcagcc ccacagtcat cagggactcg ggctccttct tccttctact 37920 cttctggttt cagcttgtga ctttggtctt tacagttgcc tcatggcctg agatggctgc 37980 cagagttcca acaattgcat cagcatgggc tctcaaaaca agcagcttgt atttttctat 38040 cttaccccca ttttcatggc tggctcctcc tcatccttct gctgtcacct cctcagagaa 38100 geetteeetg gecacectae ctaaagteee etecatetea caetgettta ttttetetge 38160 aggacacacc atattggtaa cctcgctcct ttattatttt ccttgtttgt tgtctgtctt 38220 ccccaccaga ctagtcccta tgatcaggga ctgtgtctgt cttgtccttc gccataatcc 38280 cagtgcctca acagtgcctg gtacataata gttgcccaag aaatgttttt taaatgaata 38340 attgatagta atcaaagata attttgtttc ctgcattctt ccatcagcat gtcatcatga 38400 atattttccc atgttgctgc ctagtctgta aaattaattg aactagacat ttaccaaggc 38460 cctccctggt ctgacaagct gaatgagtgg gagggaggtg gatgtgaaca ggtaagtcag 38520 ccttcctggc actgctcaca gcccagactg acttggggaa ctcagaggcc atttccagga 38580 acttcattca cgcagcaagc gtcattgagt cccatctcag tgccaggctg ttgctgggtg 38640 tgaggtatat ggagagggag cagtaggagc caccctggag gacttgtggg ccaatacggg 38700 gacgaagaag agacagacag gagaacaact ggcgataata caatgggcta gattcccaat 38760 gcctgcagac agctggaccc tgtgctaggg agcactcacc tccacaaccc atttatcact 38820 tgacaaataa tcactgagtc cctgggcata aggcagggaa caagccagac aagattccta 38880 ctactctcat gaaactcaca ttctagtgag gagataagca ataaacacac agtcaaatat 38940 attcagacag cagaaggcgc aaggaagacc gtgaatccag atgtgtgaca gggtatgagg 39000 aggtgccact gtgcgtgggg cggtcaggca agactcttca aggaggtggc atctgagtta 39060 aattaatggt acaaaggagt caccgtgaga aactctgaga gtggaggcca ccagccagag 39120 ggaatagcca gggcatagtc tgaagattgg aacgagctca agatggtgga ggcacaggaa 39180 gaaggccact ggctggatgg gagtgatggg ggagggtgtt ggagacagag gtgggatcag 39240 agggtgcccc aaactcagca atcaagatga atagtattta atgcaatatt tcttaaatca 39300 aaattaatgc aaaaaaccca cgatgaacaa aattcaacat ttcaaacaag gccaggatca 39360 ctaacaatgc tctgctgagc cacactggaa cctgagacaa aggaaaaatc agtgaggctg 39420 attgtgtttt tatttaaaat tttgatatct tgtgtgttgt ggatttgttg ttattcatcg 39480 caggagtcat catggtagaa aacgtgtcac ctggcatcaa gatcatggtc tccacaacca 39540 ggctgtccgg gttccaattc cttctttacc attatatgtt tatctgtatg ctatggggcc 39600 agtttcttga cctctctgta tctttttctc catcagaaga tggagataat aattgtgcct 39660 cccttagggt tactgagagg cccaaatgat ttaatataag caaagagcta agaactgtgc 39720 ccagcccact gtagccctcg gagaatgttg gcagctagtc tgtagcattg gactggtaca 39780 gctttggttc cttagagcag tggtccccaa cctttttagc accagggacc agcttcatgg 39840 aagacaattt ttccacaaac cgcagggggt gggggtgggg tgatggtttc aggatgattc 39900 aagcacatta catttattgt gcactttatt tctattatta tttcattgta atatataatg 39960 gaataattac acaactcaac atgatgtagg atcagtggga gccctgagct tgtttttccg 40020 cagctagaca gtcccatctg ggggtgacgg aagacagtga gtgatcatca ggcattagat 40080 tctcataagg agcaggcaac ctagatccct cccatgtgca gttcacactc ctgtgagaat 40140 ctaatgccac cactgatcca acaggaggtg gagtcaggtg gtaatgccag cgatgaggag 40200 cggctgcaaa tacagatggt ttgcccctcc ccaccactgt tcatctcctg ctgtgcgtcc 40260 aggttcctaa caagctatgg accaataccc acctgtggcc tgggggttgg agacccctgc 40320 cttaattcta agcggggatc cagggccaag tgtggggagc cagagagtgt gtatgtggaa 40380 gtcgattgtc acagaagcct ctagggtggc caaagaggag gaggttgttg caaagatgca 40440 ggtgaaagat acggacgggt tctggaggtg tttaggagac agactctaca ggacttgctg 40500 gtggttgaac tgtgacggga ggcaagtgtt ggaggttggg gacagagacc aggctaaccc 40560 ccagcgcctg gcagtggtca gggctgaatg cctgggccag gcatggcccc tgcccccatc 40620

ccggccctgt gtgtgtttca gagggagctg aaggaccaac ttcaggccct tcaagacagc 40680 gagcgggaac acaccgaagc gctgcagctg ctcaagcgac aactggcgga gaccaaggtg 40740 agcctggccg gggcgcggag gtggggccgg cagagatgag ggcagggctt cgaggggcgg 40800 ggccagctgg ggaagagggg cggggcctcg ggtgtgcggt ggaaacctgg cttcaaggag 40860 ccaaacctgg agtgagaagg gcagggtggg gaagagggta gggcatccgt gaagttcaat 40920 ggggcggcac ccaccccatc atgactggcg gcaaggatgt gggctggtcc ctcggttaag 40980 gacggggcca tttctccctt cccactttgg gtggaagttg aggcgggtcc cgggaccctc 41040 cggaaacccc ctgcctcctg aagggctggg gaatgtgctc agtctctttc tcctctcccc 41100 ttattaaaac cgcccaaccc tggtgttgtg acacacactt gtagtcccag tctcttcaga 41160 ggccgaggca agatgatggc ttgagcccag gagtttgaga ccagcctggc caatataacg 41220 agatgccttc tctacaaaaa aaaaaaaaa attgaatata gccaggcgta gtggcacatg 41280 cctgtagtcc cagctactct ggagactgag acagatggga agattgcctg agcccaggag 41340 tttgaggctg cagtaggcca tgatcatgcc actgcactcc agcctgggtg acagagtgat 41400 accetytete taaaatgaat gaatgaatga atgaatgaat aageeeattg cetaggagte 41460 aateetgage atgteeeete gaageeetee agaggtggee eageeetggt ateateteee 41520 cttaagetea ggecatggga tacagaetet gaaaggtagg gecaaaetet geagtetetg 41580 gctaccgtgg tttgggaaac aaacaaacaa acaaacaaac agacttttcc actgacttga 41640 gaaggacatg ggttctgatc ccaccactaa ctcactgtgt gactttgggt aaattgcatg 41700 ctttcctggg tccccagcct tcccatctgt ccagtgggga ctgccaggct cagtccagca 41760 ctctgggact ggaaggtgcc gggtggagtc cccactatac agagtgactc tgtgtcgtga 41820 ggcctggggt gatttcaggc tgaccccgct ctgtcagcag gagctgcggc agagccttag 41880 gaatgcgctg ggcctctgga ggtcatcctg gggcctgaag acaccattgg aaacccagat 41940 ctatgcccca gcttggccac caacccactg tggggtctca ggaaggtcat gacaaacaat 42000 tetteacaga acattecaga gtgeetetgg geaggaeeet egggggeaae agatgataaa 42060 cagtcacagg atgctggcct cattgcttct tgcagcctca gtttccccaa ctgtctggtg 42120 attctgtacc tcttggatga tgagaagcaa atggaagcct ctctctgtat gagagcggag 42180 tattatgggc tgttccttct ccccagcagc actctcttct ctccacatcc cacacctct 42240 ttgtttttct ccactgacct cttcctcccc cgctttcctg tccatctgtc tgcctctggg 42300 gggtcctgtg gggccacatc cccctcgagt tcccccagcc ccacttcctg tctggactgg 42360 ggtgtttata caagaaatgc ctatggatgc tttggaggtc atatttcacc tggtgcctga 42420 cteggettte etgetgegee tgeeceteea atggeetgge etgagggeet gtetgatete 42480 cctcctcagg ccctctgttt tccttggtcg gcgccctggc ggggtgatgc attcttggca 42540 gggtgttttt ctgaaagggc cccagcgcct ccaggcccta gggtgttcca agggatgtgg 42600 tgggttgggg tgggggctgt ttccccagcc acagagctga aaggaggggg ttggggaaag 42660 ggtgactctg ccctggaaag aactagaata aatggggtgc accagttgag cagaactttt 42720 ctctgtgctg agaattgtgt tcctcttcat tatcctgcca acctcacaga atgtcacctc 42780 cacgagagca ggattcccta aaacctagca cagtgtctgg cacacaataa gtagttataa 42840 aaaaagtgat tgaaaggaaa aaaaaatcgg ccaggcacag tggctcacgc ctgtaatcct 42900 agcactttgg gaggctgagg cgggcggatc acctgaggtc aggagttcaa gaccagcctg 42960 gccaatatgg tgaaaccccg tctctactaa aaatacaaaa actagctggg catggtggtg 43020 ggtgcctgta atcccagcta ctcaagaggc tgaggcagga gaattgcttg aacccaggag 43080 gtggaggttg tagtgagcca atatcgagcc actgcacccc agcctgggca acaagagtga 43140 aaaaatcgtc ccaggtagga actgttgtta tctcaatctt atcagtgagg caactgaggc 43260 acagagaggt tgagggacca acctgaagtc ccacagctag aaaatggcaa cttgggagct 43320 taccatccag teetgteaga geecagtgea tagtgeaget gggatgtete etggggtgte 43380 ctgcaagage tatggctttg tagtcagcaa gccaggtagg tcagtaggac tcatcgggaa 43440 tgtacttggg getecagggg tggetgeeae tetgatgtte eaetgetgge tgeeetgtee 43500

```
ctgccttccc ccctttccct cccatcctct ctcgtccttg agacattgaa accccagcct 43560
ggaaagaagc tggagcctgc acccagctct acggagcaat ctcagacaag actcttccct 43620
ccttcacccc tcaagcaact cctgattgcc agccttgtac caggcgctgg gatgggcaca 43680
ggggtgcaga gccgagggag atgtcattcc tacccagcag gggcccactt actagccagg 43740
gagacagaaa atgtgggaca atgtattaag actgttgaca aaaggctctg ggaacatcca 43800
agtgcctgaa agagaggaaa gttatctctg aagaggtcac tttcaagcta ggtcttgcag 43860
gatgagtagg agtttgccag ttgaatacag ggtttgggta gggtcattct aggcaggtgg 43920
agttgcaatg cagtggcgct agggaggtaa gctagggtta aattgagaag gtccttgaat 43980
gccagactaa agagttcagc attttactac gtgtcaagga gctaaagaag gttcctaaac 44040
tcaggatcat ctgtgattca gttggcactt tagaaggatc actctgacag tgagtttgct 44100
ggcaaagaca agagttgact tgtagaccaa gtgagttgga aagacctgtg ggaccccaga 44160
gggatgtgtt ggggagactg ttggaaaaat gggtgtggca ctcaggagac aggcaaggcc 44220
atctatatgg acttgggaac catccttaaa gcagttcaag ttgaaaatgg gggcaggtgt 44280
tcagggtgag gatggaaggc gctgacctgg atgagccccg aggaacatgg gaggcagaga 44340
ggcagcagtc acagagatgg gaggcaaagc agaactttca actgggagag ggtggcgagt 44400
gggctaagtg ctgcagagtg gtctaggagg agccagagga gtagctgcgg agtctgggcg 44460
cctgtggagg gcagctccag gtggtgcagg gacgacggac cccatcttcc ccatcagcaa 44520
catgccgctg cagaggcctc caccctcccc gggtgaggag gctcaggaag gccacggcag 44580
cetggeegtg catececaga etetegteeg ecceetttg tetgeetgge gttetgggtg 44640
ggcatgcgca gcgaggctgg cccaccgcca gcagttcttc ctgcaggcca gcagccgcgc 44700
gtcggggagg gaacaggccc taattgagcc tttgtagagc ctcccacaga gccctgggca 44760
ctgaacacag tggggtttct gactccatga actcccagcc agaatcccac aaagtaaaat 44820
tgcagaggca ggccccacat gctgctgcag cctggccgca cttctatagc ccgtgtcgtc 44880
ctgacgttaa gecetteete atgeggetee etetgeetgt teecetgaee eecaactgae 44940
atcctgccca tccctcaggc cccggctcag aacccgtctc tcaatgaaga cttccgggaa 45000
acgettatta gaattgeagt etteaataac eaggetettt etetgegeet tggagtgege 45060
acaacaacac cccctcattt catcttcacc acaatcctac aatgcagttt ttgttactcc 45120
tttcacagat aagaaaacta aggttcacag ctcttaggca actgacgttg ccatagctag 45180
agacccagag ctagagteet taegeagact gteaggeace aaacetgtge cetteactae 45240
ttcacccttc ctgagcctca cagtgccctt gggggcagag aaaaccatga aagttcatgc 45300
ttacctccct gatcctgtct ataaacacca gtccttgctc cttagccaga gggtcctaga 45360
ggtaacagga gacagcgagt aaccaccaag gttttctcaa tacgttgcaa tttacaaagc 45420
tetttgatgt etgtgatett gteatettte ettgageece etgaatgage eecatgaatg 45480
atttttttaa aataaagact teageeggge aegatggete aegtetgtaa teeeageaet 45540
ttgggaggcc aaggtgggca gatcacctaa cgtcaggtgt ttgagaccag cctggccaac 45600
atggtgaaac cccatctcta ctaaaaatac aaaaattatc cgggcatagt ggcgggctcc 45660
tgtaatccca gctactaggg aggctgaggc tggagaatcg cctgaaccca ggaggtggag 45720
gttgcaatga tccgagatcg tgccatcaca ctccagcctg ggtgacagga gcaaaactcc 45780
atctcaaaaa actaataata ataaaagcaa aaaaaataaa gacttcacta tgtccttgag 45840
                                                                  45845
agaac
```

<210> 7

<211> 23433

<212> DNA

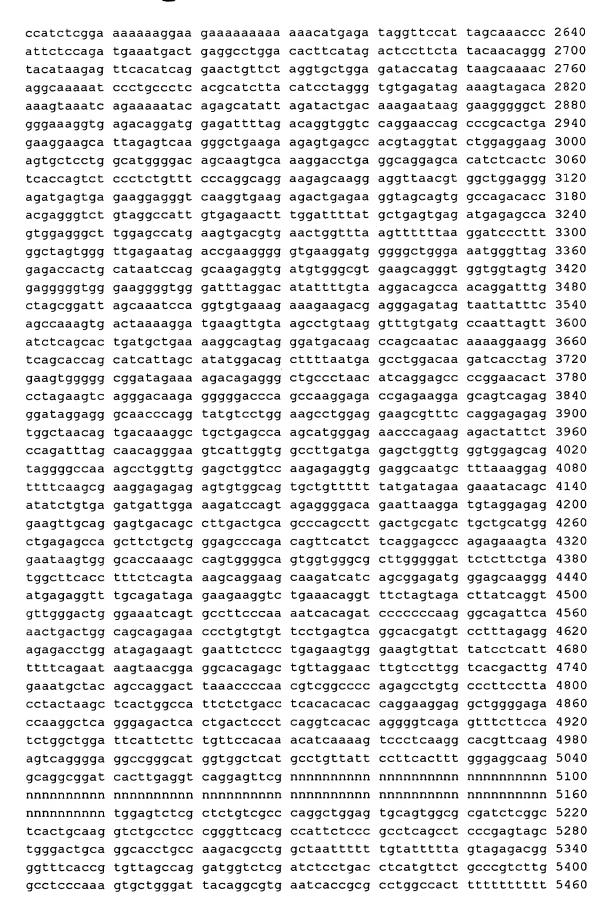
<213> Human

<220>

```
<221> modified_base
<222> (5071)..(23433)
<223> n = A or C or G or T/U
```

<400> 7 atottcacco tgtcccctag coctcactco agotccctca tccctcctac ccccaagcca 60 gaaacctggg cattatcccc ageteettte tettetgtae eeetetagee aacacageag 120 ggtcaaagag gctgccctct agatgtttct caaaccgtgt tcctcaccat tgctgctgct 180 cctctagttc aggcctcatt ttctcacctg ggccatttca ttagctattt aatggaccac 240 atagaacatg cccatccttt cctaccacca tgcttttgca tgtgacattt cccccaccac 300 gegtgeeett teetaeett teetetetgt gtgteaagge tetegattte eteeteteae 360 ccagagatca ccccatctgc tcccccagcc ataacccctg acgactgtcc cccacagtct 420 tecaceaaga geetgeggae eactategge gaggeetteg ageggetgea eeggetgetg 480 cgtgaacgcc agaaggccat gctagaggag ctggaggcgg acacggcccg cacgctgacc 540 gacategage agaaagteea gegetacage eageagetge geaaggteea ggagggagee 600 cagatectge aggageget ggetgaaace gaeeggeaca cetteetgge tggggtggee 660 teactgteeg ageggtaagt gecaeeegee ggggeeetee eeggetgaee ateceeteet 720 cgacccatgc tgggcagtgg gagtggaggc agatgggatc cttagcagag aattctttca 780 ttcaaatctt catcaaacat ttacgggaca tctgctatgg gtaggagcat gaagccttga 840 gtatgaagcc agtgaggctt gaactagagg agcagcagca atggtgagga acacagtttg 900 aaaaccatct agagggcagc cactttgacc ctgctgtctt ggctctaggg gtgcaggaga 960 gaaaggatct gggaataaag acttcatata tttacattat tatatatgta atatattctg 1020 tatacattat agatagtagg tagcatttaa tagtgtttac aatcataata taaatatatt 1080 acatattatt ttatttatga taatgttggc attacgtgtt actatataaa ggctttatat 1140 tactgtaacc ctctcagtcc ctttgaaagt agttaccact gtcatcatca tttcatgcat 1200 gtagaaactg aggctcccgc tgggcacggt ggctcacacc tgtaatccca gcactttggg 1260 aggccgaggc aggtggatta cctgaggtca ggagttcagg accagcctga ctaacatggt 1320 gaaaccccgt ctctactaaa aaaaaataca aaaattagcc gggcgtggtg gcaggcacct 1380 gtagtcccag ctattcagga ggctgaggca ggagaattgc ttgaacccag gaggcagagg 1440 ttgcagtgag ctgagatcgc gccattgcac ttcagcctgg gcaataagag cgaaactctg 1500 tctcaaaaaa aaaaagaaaa aaaagaaaaa aactgaggct ctgaaaaagct acatcagttg 1560 gccaaggccc cccatctggt aactggtaag ccaggattca agcctaggtc tctgtgaccc 1620 caaatcttcc cttagtagta ataacactta gtcattggtt tgttggtgat caatactgat 1680 tgctaagatc atgaatttgg cattgaccgt gaccgagcac tgtgctgagc atctgtatat 1740 gttatgccat gtaattetea caaaaageet agaaggetga tgetageata geaceeattt 1800 taaagatgag aagactgagg gaatggttag agaggccaga agcagcacaa gcaggcactt 1860 gaatctgagt cccacagact tctcactcat gaccacatcc tatgccagct gccctgaagg 1920 tggctgcggg gcccctggca ttggggcagg aatccagtcc ctggtgcagc cccctttcct 1980 gctctccttc caggctcaag ggaaaaatcc atgagaccaa cctcacatat gaagacttcc 2040 cgacctccaa gtacacaggc cccctgcagt acaccatctg gaagtccctg ttccaggaca 2100 tccacccagg taaggcatgg gttatcatgg tccagagcta ggtggggcat gtcccagcac 2160 agcccagccc cctgtcctaa acacagcatg gggcagttgg ggtgaatgag cagagtgcct 2220 tgctgagcac ctagtgtgtt ccaggacctg tcctgggcac ctgcacaatc actcagctca 2280 gtggacette ataacacece aggagatgge tgggegtggt ggeteacace tgtaatecea 2340 gcactttggg aggctgaggt gggtggatca tgaggtcagg agttcgagac cagcctggtc 2400 aacatggtga aaccctgtct ctattaaaaa tacaaaaatt agctgggcat ggtggcgtgc 2460

acctgtaatc ccagctactc gagaggctga ggcaggagaa ttgcttgaac ccaggaggca 2520 gaggttgcag tgagctgaga ctgagccact gcactccagc ctgggcaaca gagcaagact 2580

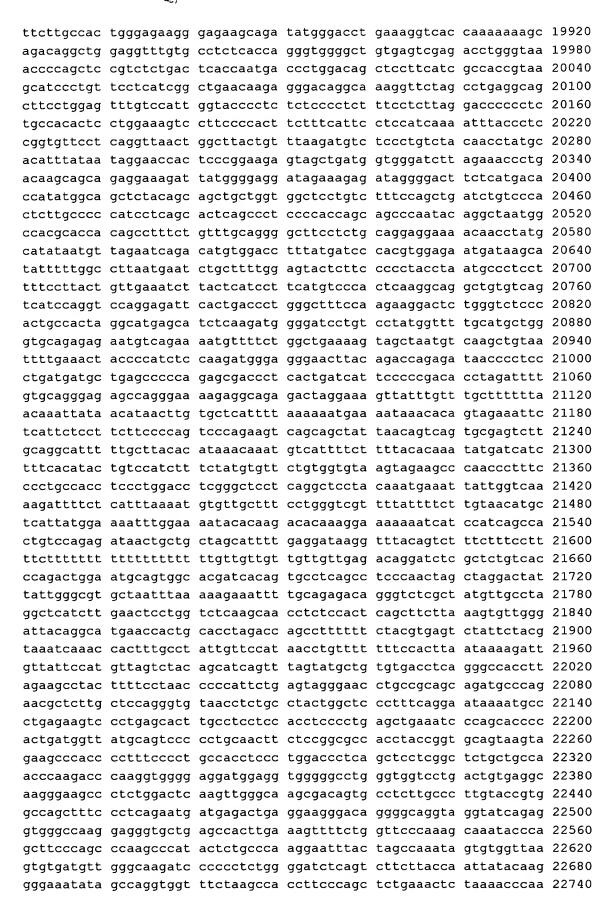


ggatacggag tttcgctctg tcaaccaggc tggagtgcag tggcgtgatc tcggctcact 5520 gcaacctctg cctcctgggt tcaggcgatt ttcctgcctc ggcctcccaa gtagctggga 5580 ttacaggcac acgccactgc acccagctaa tttttgtatt tttagtagag acggtgtttc 5640 accatgttgg ccagggtggt cttgaactcc tgacctcgtg atccgcccac cttggcctcc 5700 caaagtgcta ggattacagg cgtgagccac cgcgcccagc ctcaaaaaaa acaaatttaa 5760 ttaagaaaaa aaaaagatct aaagatggtt ccatatagct gagcaagata atggaagaga 5820 gaatgagaag ctggcaggcc ccagatccta cagggccttg aatgccaggc tgaggtgcct 5880 ggactgcctc tccgagctgt gacagacatg gagcaggtgg cagctgaggc tagaaggctc 5940 cccaggetee etgetecagg getgteetgg gteagtgaet ggggagggaa teggageete 6000 ggatgcactt ttgcctccca gaacttagtc tcagcctccc aaagtgctgg cattacaggc 6060 gtgagccacc acacceggce catetttaga tettaaatga gecatattet eesteateta 6120 catgttttgt attctccctc atctacacgt ttgcacatgc cattcccttc ggctgcagcc 6180 ctctacacaa tccttagtct ttgatggcca actcttactc tccttggcat cttagtttat 6240 aaaaccttcc tctgagaagc cttcctggat ttctcaaggc aacctgggct tacatggtct 6300 cactgttttg tcattgtctg tgtggctgtc tcactcacta gactgtgaac tgtgagggtc 6360 aggggccagg tetgatteae teccageage tageacagea aatgtttgte gataaatgea 6420 taacaaaatg aatggatcct agtctcagtt ctgtttctag aatagcgcct caataaaata 6480 ggtgcttagt aagtatttgc tgactgaaga aacttgctgc acagccttga acaagtcact 6540 gcctcctctg aacttcagtt tcttcctctg aaatagggat gctagtgttc ccttctcaac 6600 tccctcataa gggagcaaag ggatgtggaa cttgccatca ccccagtgca gggtttctca 6660 accacagece cattgacact ggaggetgga ceatteettg ttgcagggee eegetetgtg 6720 ctctgcagga tgtttagtgg catccctggc ctctatccat tagatgccag tagccagtag 6780 ccaccccact cagttgtaac aaccaaaaat gtctctggac tttgccagat gtccctggga 6840 agcaaaattg gcccagttga gaaccactgc tctagagaaa gctgcctgcc agagaggagc 6900 tgagggagga acagactgtg ctccaacatc ctgcccagag cagaggcccc tggggagttc 6960 agagagcagc agcctggttg gctgggcccc tttctttgtc tgtggggcct gtgaagtcag 7020 tetggeteet etgeeageae caaageeett tatgteeaga tgggaggggt geeeceaggg 7080 acctagecea tggattetag eagetteetg eetgeeete eeeteeaget eaggetteet 7140 attgggtcac ctgagaaccc catccagcac ctgtcactcc cctgctctgg cacttccacc 7200 ctcccccacc tcccacccct gtatcccacc cccagcctaa cattaggaag ctctcctcca 7260 actgtgacct tettacetae etggtetaaa teececaact eecaggeaca aactgeetee 7320 tcagccaggc caggcagccc attgtcccaa ggacaccagg agcagcctgc cttgctcctg 7380 cettetecee atcetggget geteteceeg eccetgeta atetgaatee agteattttg 7440 agteceggea catteettge etagetgtgt gacceagage aatgeactee ceteteagag 7500 ccccagtttc ctcatctgta aaacaaggat agttgcattt ctctcccagg gtagctatgc 7560 agattaaatt atttgtttgt aataatgatc ctgtaacact tagtaagtac ttgattcctg 7620 tctgtttatt gttattatca tcatgaatcg acagatggtc cccagtcttt ttttttttt 7680 tttttctttt tgagacggag tttcgctctt gttgcccagg ctggagtgca atggcacaat 7740 cttggctcac cacaacctcc gcctcccaga ttcaagcgat tctcctgcct cagcctccca 7800 agtagctggg attacaggca tgtgccacca tgcgccgcta attttttgta tttttagtag 7860 agacagggtt tetacatgtt ggccaggetg atetegaact eeggacetea ggtgateege 7920 ctgcctcggc ctcccaaagt gctggaatta cgggcgtgag ccaccaagcc cagcctcccc 7980 agtettgetg aacaggettt etggggeeac atgetgggaa gageatgatg tgaaaagace 8040 tcagctgaag ttccaactct gcttcctctc caagtggcag cttgagcaag ccacttacct 8100 cagagttgtc tccttggagc ctcagtctcc tcttctgaaa aatggctaga acaatttgtg 8160 cccctgggtc tgtcgtggtg ctcccatgag ctagtgagtg tgagaatgtt tttgcacatg 8220 tctgccctgt acatctgagg gactgaggaa cctggttttt taaaggcctg gccagaggaa 8280 aacgettaca gecageettt catgttetgt caggeetetg catgttegaa geetetgtte 8340

ttgagaacaa agaaacacaa tccactcact gccaagcagc tgtgctgggc tgtgccccgg 8400 gagggettte teegetgett gggeagaatg tgattgetea gtggtggeea ggaaacatet 8460 cctgggacct ccacagtcca tgatccttcc tgaatgcctt tgacctcaag gtctcagaga 8520 tgcttaaatg aatggacaac acacctggag accagacggg ctgcctcagt gtctggcttg 8580 tttttataaa tcttggtgtc ccgggactta gaaatgagct ctgacctgta gaatagtgag 8640 cccccaggga ctgcgcttgt tttgctgggc ctgtcacctc ctggggatga gggacagatg 8700 gaggaactga cttctcagag ggggaagggg tgttgccatg ccccttctag gtccctttct 8760 ggtctgaagg ttgttactcc tgttagccct agcctcgggg agggagcccc aggagccaag 8820 accetgtgtt aatgattegt geaaggeett ggaggtgget teageeaggg tgeeacacee 8880 tgccccagcc tcaccccttg gggtatagaa gtctcctaag agtcaggcca cacccccgcc 8940 taagagagtg gcaggccctg cccctaggcc ggcccagtga gtggcaggcc ctgtacccat 9000 cctgtcccct gggcttcaag cagcacaggt ccgctcgcca gggctggcat tcactgggtc 9060 aggattteet ecaatetgea ggettatett tgtetaetgg teteagaeee aeggagagee 9120 cccttgtctc cctcctaggg tgccctccca ctcatcagtg gcaccacaag tggctcacat 9180 tgtcctacat aagctacaag tctgaagctg agcccttata cctgcttgag ggtacccccc 9240 gccccgcacc agtccttctg ccctgagcct cggttgctgc ctgttgctgg tctcaaatca 9300 cccaggcgcc ttagatatca tgcctaggtt cccccagcac tctgaactgc tgctgttcat 9360 geetgggeae tgtgeatege tettetgeee etcegetgte acaeetgagt gtgateeaca 9420 teceactgte ataggggtgg eceaectatg tetgattagg tteetettet eaatetaget 9480 cttcccccta ccacacactc ctcctacage teceteccae teceaectee egaeeceaet 9540 gtgggaattg cccacattcc accaggcagg ggccccctgg ttctgacaag ctgcctgtgg 9600 ccagtcagac cacagggtga aacatccagc caccaactca gtggccgtcc tctcttggtt 9660 ccccgtcttc tatgtccctg gacagaggat tgtgtttcca ttgacccctc tattcacaag 9720 gctaattact tccatacagc cctctaagtc caaaggacag aaacaaagag ggtaaaatgc 9780 aaaactaaac ttactcctgg caaagatcat ggaaggaact tgatataggt cactggtcca 9840 gtgggtatat gaacagaggc acagttcagg gactggctgt agctccctgt tggggacagt 9900 ccccatcatt gaggcatctt atttctgcac atcagtgcag ccaacagagg caactgaagt 9960 agggagaatg ctccagccaa gcataaccat gtccccactt cgccagtaaa ggaaagagcc 10020 . agagagetgg atgtecaaga eeccaaggaa eagaggeaat teettettee eactttteet 10080 catctctgtc ttgctgttgc ctggaaatgg tcattcaggc taaggaaagc caatcccagt 10140 ttcctccttc tcctctggcc agttatcagc tccctcaggg agcagagagt aaacagaggt 10200 cttaacaagg gttcatgaaa tttttagtca gacctgctaa gccggtgtgg ccagcccaga 10260 gccaggtgat gcagcccatg ccacctgccc aacacaaaca tggccagttt aatttggtga 10320 gtettteegg aaatgtgeea caageeagge eetgggetgg getetggaea eacaagggag 10380 agccccatta gacagtacac ggtccttgcc ctcttggtgc aaatggggaa atagggcaaa 10440 atgtgatcac agaagataat accccatgcc agtatcaggg cacaaataaa gctaaagaat 10500 ttcaggccag gtgcagtggc tcacacctat aatcccagca ctgtgagagg ctgaggcagc 10560 aggatcactt gaggccagga gttcgagacc agcctggcca acattgcgaa acctcatctc 10620 tatgaaaaat ttaaaaatta gctgcgcata gtgatgcatg cctatagtct cagctactca 10680 agaggctgaa gcaggaggat cacttaagcc taggagttgg aggctccaat gagctatgat 10740 gacactactg cactccagcc tgggtggcag agtgagaccc tgtctgtatt tttttttt 10800 aaaagaatcc agcacagtgg ctcatgcctg taatcccaga actttgggag gccgaggtgg 10860 gcagatcact tgaggccagg agttcaagac cagcctggcc aacatgacga aaccctgtct 10920 ctactaaaaa tacaaaaaat tagccaggcg tggtggcgcg tgcctataat cccaactact 10980 cgagaggctg aggcatgaga atcacttgaa cctgggaggt ggaggttgca gtgggccaag 11040 atcatgccac tgcattccct cctgggggat aaagcaagac tctgtctcca ataaataaat 11100 aagaaaaaga agaggcaaaa ggaatttcag aggacagaac gagcacatct gctgggtgac 11160 caggaaggct tcccaaaggg tgggcctttt gaatagagcc tctgggggtg gttgcaacaa 11220

gcagagagga ggaggtggag ggaaccgtgt aagcagaggc ttttggaccta agtggggtag 11280 ggggcagaag tgagaggttg gctgggagaa aggactggcg ctagattgca gacgaccttg 11340 gttagtcctg gctctgccaa tatttgcagg atgacctaag tttgtcatgt ctcccctctg 11400 ggtctcagtt tcctcatctg tcaaatggaa gagttggcct agaattcatg gttttcaatc 11460 ttttcagacc cattgtctac ttttcataac aaatcatgtg taatatctca aagataatat 11520 aaccttttta taatttcaag tgtaaccttt tcacaatttc aagtgttgtg tgtgtatatg 11580 tacatagata catactctga ctattaatat gaaggaaaat agaaggaaat tattaataat 11640 aaaatatttt gtatgtcaac atgtagatgc tcacccacaa tcacactaga aaacctaaca 11700 aagcagccag gtcctctcgt cataggtaaa acaccatcct gcctcaaatg cctatacagg 11760 taggttgtct cagtcagtgg tgttgccctt agggatgtat tttccaacaa agcaaacagt 11820 tettagggaa gttecaaaca aaacaaatge ageetteeet teatttacae agtggttgea 11880 ttctgaaata ttcagtatat attaaaactg caaaaaaaat ttcatgttta tacatgaaat 11940 ggagttaggt tatagtttct tatccttata aaaaagattt ttcatccaca tgaatgtctg 12000 ctgggacacg tgaaaatcac tgggagtcgg ggaaggtgtg gggcagaact tccctttgca 12060 gaactgtcct gtccatttcg tggtctttag catccctgga tcccagctgt tgttaagaca 12120 acctgaacac actcaccaat ttccccattc cccctagggg gcagtagcaa ctggatcatc 12180 tggaagetee ettecagete taaaatteee caattetagg eeteattetg gttaatteaa 12240 caaacatttg ccagtgccca ctatgtgctc cgccctgggc atcaggcagt gaacaagcag 12300 ctgtagcccc tgctcccctg cagacaatat ctggaaggac cttaaccacc acccttccat 12360 tctacagagg aggaagatga ggcccagaga gggcagactt gtattcaagg tcacacagca 12420 ggtcagaggc ctcctgcgta ccaaccagaa ctctgccctc aggaaggcac tgcatggtgg 12480 gtccacagee tteteceeae teatettete teceteetee aaceeecaca gtgccageeg 12540 ccctaaccct ggacccgggc acagcccacc agcgcctgat cctgtcggac gactgcacca 12600 ttgtggctta cggcaacttg cacccacage cactgcagga ctcgccaaag cgcttcgatg 12660 tggaggtgte ggtgctgggt tctgaagcet tcagtagtgg cgtccactac tgggaggtgg 12720 tggtggcgga gaagacccag tgggtgatcg ggctggcaca cgaagccgca agccgcaagg 12780 gcagcatcca gatccagccc agccgcggct tctactgcat cgtgatgcac gatggcaacc 12840 agtacagege etgeaeggag eeetggaege ggettaaegt eegggaeaag ettgaeaagg 12900 tgggtgtctt cctggactat gaccaaggct tgctcatctt ctacaatgct gatgacatgt 12960 cctggctcta caccttccgc gagaagttcc ctggcaagct ctgctcttac ttcagccctg 13020 gccagagcca cgccaatggc aagaacgttc agccgctgcg gatcaacacc gtccgcatct 13080 agtecaggea gaaggagace acaaceteet gggaceactg ceaeetgeaa gageeetgee 13140 caggagatag aagacctgga ctccagccca ccgtggccac tggagacctc aggccagttg 13200 tttaccctcc agcctccagt ctgtaaaatg gaggttgcat tccctacttc ctaaactctc 13260 ttccagcatc gatgttctgt agctctgacc ttgataggga tacagctttg atccaaggat 13320 gtgacatgge ttetecteag ggeaaceeet geecaaceet cateeceate tteteagggg 13380 caggggacta cettecagtg teteceteca geccageeet gaeeteagga agtgteagag 13440 catggccagt agttggcagc ccgaaagaca cacagcaccc tcttatgtcc catggcctaa 13500 gacttacccc tgaccaagct agtgatgggc catttaccct tgaccccagt ccacagtggt 13560 cacaggtagt acctggteet agggttgeet gagageeaac eteteetgee acceecacae 13620 caagaactat atggttccta cttctcccac tgatctgctg gtcagtgatg atgctgtggc 13680 ctgtggaagg cacctggtag ttgagtccac acattatagt catgtgccac caccttcctg 13740 cccacaggcc gagggacagg gtgagggtat acccaaagct gatgcagagc ccattagcct 13800 aaaagcaact gcaggacaag cctccctgga tgatcgaggt ccccagtagc tctgaacaag 13860 agtecageca accetettea gecaggeete tgtgacetge tagggtgeag gaggetteea 13920 gaagcagttg ttgtaattag gacccaagca ctgggagggg ctgttggcta gaccccttgt 13980 cagacttggc atctatctca gttaggatcc tgctgcagaa aacaagagcc acttgtagct 14040 ggtttaatta gacaaggatt tactacctgg cccctggtgg cttgcaaaat tgttggaaga 14100 gctggagaag cagactctgc tgaatttcca ggaactccca gcgccagatt catcatgtct 14160 gttgtgacca ggaaagctgc ccccatctgc aggaagccac tatgccagaa agctgctgac 14220 tgcagaacta ggctccctct gccacggtcc gtgccagcca atagatgtcc tgaggcctgc 14280 ccctctccca cttcactcag ttcccaaatc taaattttta caagagattc tgtttggggg 14340 aacttaagtc agatccagaa ccttggctgc aagggagtct gggaaatgtc atttccctag 14400 aaggaagtta gggtgggtgg agcaagcccc acctgcgttt ttctgccaca gcatccaatc 14460 gtgaagaact cgggagaggg tggagtccac atctagggtt gtcctgcccc ttggctctat 14520 ccctgcccag aggtgggaac tggaggagtg ggctgcaaga ctgagcctaa atgtctcccc 14580 ggccttgact tttctttcta gtcctggggc ctagattctg cacttggggt ctctgacaca 14640 acacaccatc ccaaagtagc cggaagagct aaacacaggg ggttcttaaa atggctgccc 14700 ccgccacccg ggcctccctt gggcaaaagg aattgtcagc cctaccccaa cccttcaact 14760 accagaatct gggccacccc agcagtattt ttatttaaaa tgttgcccat tttatgagtt 14820 atgatcaatt tgtattaaat taaagttaca gatgtcagta gccagttcca ttcattttga 14880 caaacacaca ggcccaccca gctctgtccc aggcagtgca cacacatgag catagctaat 14940 ccacaaagca gcccggctgg gtaaatggta ttatgctcat tttacagagg aggaaaattg 15000 aggttcagag agaagccaag acttacctgg ggtcccatat cccatgctgg caagtgccac 15060 accacaaacc tgtccaaaaa cttaccagcc agggaaggct gtcagtcttt acctggagga 15120 gaggtggtgg tagtcttggg agcaggcagc aggcagctca tggggcagtg gcaagagcct 15180 ggtctcggga accacacaga cctcagctca aatccaggct ccatcactgt gtgactttag 15240 aaaaatgacc accetetetg ggacteagtt tteccacatg gaagatgagg ataccaattt 15300 cacataattt attggtaagc tgtaaagtgc agtgcactta aggaggccct accctatccc 15360 cccagctgcc tcccagagtc agtgcctgga gctgtatggg tttcctgaac ctctgggctg 15420 gctctgaccc aagaagtctg tctttctcct tatgggctgt gacgggtatg gaaccaccta 15480 gaccaggacc atcctgaggt ccatcccacc tctgactgat gaggaagcat cctggctggg 15540 agttaggaca ggctctgcat gtggacacac aggctgtgca cacttaagtg gaaaagactg 15600 tcgactaaag aagaaatatc aagcttttaa agaattaaag ttcactttac ttagaagtct 15660 tactgagtac tatagacagg cctagagccc agcagcggcc ctttagagag gttctatcag 15720 tegggeecag gacagtattt tageecactg ettatataea ggtggtggag gtttagtaea 15780 cgcaaaatca catcacactt gctcagaagt aacattaaag ccaccgggcg cagtggctca 15840 tgcctgtaat cccaacactt tgggaggcca aggcaggcgg atcacctgag gttgggagtt 15900 caaaaccgcc ctgaccaacg tggagaaacc ccgtctctac taaaaaatac aaaattagcc 15960 gggtgtggtg gcacatgcct gtaatcccag ctgctcggga ggctgaggca ggagaatctc 16020 ttgaacccgg gaggcggagg ttgcggtgag ctggagatcg cgccattgca ctccagcctg 16080 ggcaaagagc gaaactccgt ctcaaaaaaa aaagaagtaa cattaaagcg gaatcatata 16140 tcaacgtttg catgtaagag tgtgtctggg ctatagatta cagaggcata atcatgaatg 16200 ccatcagaca ctatcttctg tacaggaaaa ggcaaggact aggtttattt atcttttaag 16260 gaacgtagtg actcaggcaa gagacatggg ggccatgccc actattctgt cttgtctcca 16320 aagtatccct ccacagagcc gcacatggtc acagagtcag aggcttgtga aattatgctg 16380 gcaaacagaa atgagggaag tagcttcttc catttgctac tgtgtctccc aggccactgg 16440 gtgctctctg cagtgtgcaa gggagtacag cacccctggg agcccaggac tggtgttggc 16500 tttctgttaa gtcattttca ccctaagcca ttcttggcct cctcacccac agaatgaggg 16560 aggttagget geaggeeaca ggtggatett catetacage etggagetgg ggagagggaa 16620 ccaccccagt cattgacttg cctgggtttc taggaagagg aatgagaacg aggatgggag 16680 aggggctgtt ggcaggggtg ggtggagagg tctctgattg tctgatggag agcagcccag 16740 ttcacaggga agtgactggg gtgattctga gactagagta tcccaagccc tcccccatcc 16800 tctcagatcc ctgtgactgc tctaaaacca cgccctctca ttttggctca gtggatctgt 16860 ctttgctcag ccttctccct ctggggtcgg agcacccct ccatggcgca ttccaccttc 16920 tececaetea geeteageag eageteeaag aaatgetgge eaetteeeag getttaetea 16980

cagtttccac gtgtgtggaa gtaactatag aggccaaatt tgcattatca actggggact 17040 cctggaaatg ggggtgtctc caagagatat atttgataca cgtccagaga attcctgaag 17100 gaaagaatct ggggttgtca ggctgatatc atgaacccca catttaacac attaagtgaa 17160 gagaggggac aaaggccagg cttgggaagg aaggagggat caacaaagcc cttacccagg 17220 acagataaaa atgatagaat ggcagtaacc ccatttggag cccccatttg tagtcagcaa 17280 gcaaagtact ggtccttttt acaccttatc taaccatcga gacacgcccc tgtggttggt 17340 atcattatct cagtgtttga gcagggaaac gtcacttccc agaggaccca cagccagtac 17400 teggeagage tggaaateaa acceggteea teeaaageta aageeagatg tetetttaet 17460 ggacctctct ggaaatgctt ctcaactttg atgatggctc cagtgacagg cagcagccac 17520 caggactgtg atctccctgg gatttaaagt gggaggttaa accaggctcc acgccactgc 17580 ggaattgtgc aattgtaagt caagtctcaa ttgtgagcca agcttctccc agggtcagag 17640 gtggagttag aaaggcccca tgtgaccctg agcaagtctc tctccttccc tggtcctcag 17700 tttccccatc tctattgggg aagggttagg tatctattct agttgattaa ttgccagggc 17760 ctgagctctg atggtccagg attctgtaag tctaacgtta ggtcccacgg cttgccctgc 17820 tcagcaccta ataaggccat tagctctggc tccttctctc tggggtggca gcagggacag 17880 aaaacaacag agatacattc tcttggcagc acagaactca gctcaagggt tctggggatg 17940 gggccttccc tcctgccagg gaggccatct cgagaggctg actgctcaca cctgggcagc 18000 actetytete eteceteet geetgggtee eagetetytt caccacceca aageacatea 18060 ccacaaggtc agttgcaaag gcccggtatc acaggcttaa atacagaggg ctaggaggga 18120 ggtgggaggt gggagaggaa ggtggagtac taacaaaggt gttgaattat cactgcccat 18180 caggacacgg ttatttcccc ttactctggg acaccaaaga ttctacacaa tcttcctata 18240 atcctgaacc acaaaaggga ggcacagcct ccaaaaaaaa gtaggagagg ggaggggga 18300 agtactttta ttttgaaatg tgttcatttt tctttgtttt attttctatc ttgatgaaaa 18360 gaatatattt ttaaacctaa atacaaaata gtacagtttt ctatttttt ttaagttcca 18420 ggatacatgt gcaggacgtg caggtttgtt acataggtaa atgtgtgcta tggtggtttg 18480 ctgcacctat caacctatca gaacagtttt ctatctgctt taaaaatttc aacagttcta 18540 tcatatttct attacaaaat gctccccct cccttgaaat tagatgaaga gggggaaggg 18600 ttgacactgt ggaccagaga cccagggact tcctaccctg atgtcatgat aagggctggg 18660 gaagggettt caggaagetg geateagagg cacaaagett caggteetgg tgagetteee 18720 aaaactgtga gactagatgt gatcgaatct gaatgctgga agggtctgag tgatcctcca 18780 gtctaacctg aagcccagag agggttagtt tctagctcca catcacacag catatggtgg 18840 agctgagatg agtactcaag tgtcctggtt cccagtcagc acatagggga gggagattga 18900 ctaactgaga gggccccagc ccaggcaaag aaaaggaaca caggccaggc tggaagggac 18960 agggccagag cttaggaggg aggtgctcag aggagaaggg tcccacatct aagaaggtct 19020 gcgggggtac aagagggcct atcagagttg ggggctgcag ctcctccgag aggagaagga 19080 gggggcaaaa gggtgatcaa atcaggaagt cctccctggg gtgtgcatgc cagtcagcat 19140 cacgggcccc aacatggctg atgagagacc cctgatctca gccctgccat ttacatagaa 19200 gaaaactgag acacagatgc aaagacagca gcctgcaggg cacagtcagg gccagatcca 19260 agteteetga etececagee ateggetett tteatgeaaa etteagtete eetettgtgg 19320 attetggtgt etecteetae eeectgggaa eetggageet gageagaagg agaaggggag 19380 agaggagggt tecaacaace ecaggeacea ggagetgggt geetteetet gttgteetet 19440 ccaaggagaa gagagagctg gcctggacct ccagggcaga gccacttcat acctgcccac 19500 acctggtcct cctttgctgg caacagagtt cagagctagc accagccaca gcaaggacaa 19560 ageceageee aggeagetge tggagetgea gggagteeea ggtaagtgaa ageattggga 19620 ctgatggccc aagggggttc cctgatttca tggcactaga gaaagccctg ggatatcagg 19680 tggtttgaat gttttgaagt ctttttcccc agaaaagagg ctcttgcccc ctcactccct 19740 gcaggctgag ccctgtgcct gcttcctctg cttaccacat accgcaggtg caaaggccct 19800 ccctgaccaa gctgccagat ctgccaatca gaagcgaggt cctggggccc agcagcactg 19860



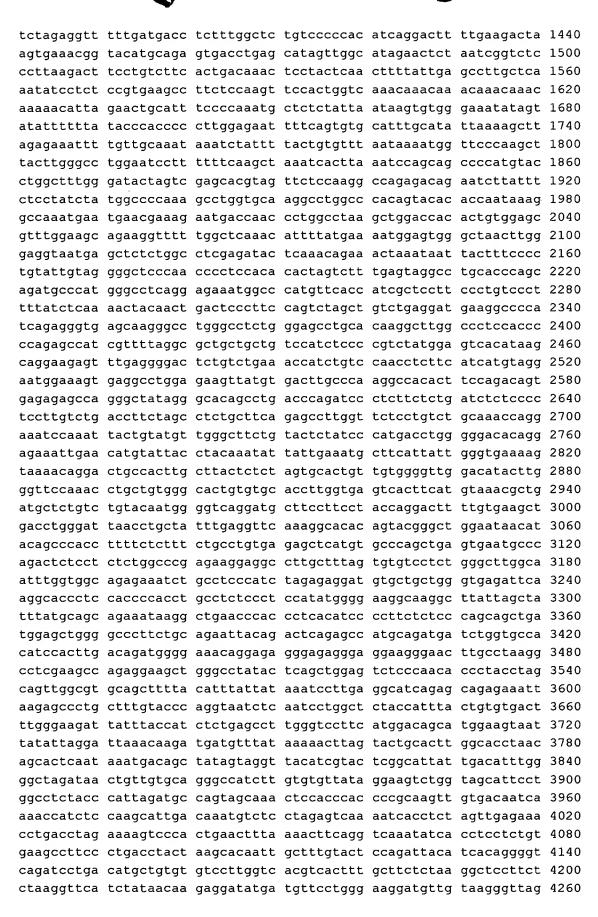
```
ctggaatcca tgttttcaaa tgctctgtt tctctcaaag tccctgtacg cctcatgatt 22800 agttgaatcc aattatagac caggtctggt ttgaaatatc attaacataa taattattat 22860 gggctgtcct ctcatttaat cctcacaaca agcataagag gagataccat ttttatcctc 22920 tttttactga taagaacaca aggtccagag agttaagatg actttctgct tacgtggcag 22980 agctcacatt tgaacccagg gctgtgac tcccaaacct gtgctcctta ttagcctcca 23040 gtccccatac taccctgtga tgggtgtagg gatcattctt cccttgctac agttaaggaa 23100 actgaggcca aacagaagag atgtttcct cagggtcaca tagcaagttc atggcacagc 23160 tgggtgaacc caggctctgt gtctcctggc caaccgtcac tccccactc ccaacagca 23220 ctggctgatt ttctttctt ttttttttt tggagactga gtcttgctct gtcgcccagg 23280 ctggagtgca gtgatgtgat ctcagctcac tgcaacctct gcctcctggg ttcaagcaat 23340 tatcctgtct cagcctcca agcaggtnn nnn 23433
```

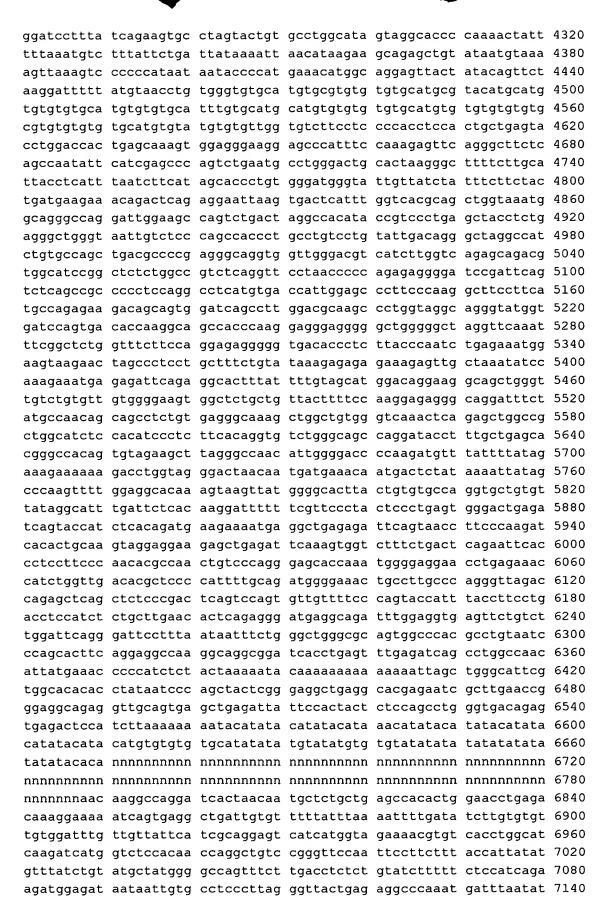
```
<210> 8
<211> 30676
<212> DNA
<213> Human

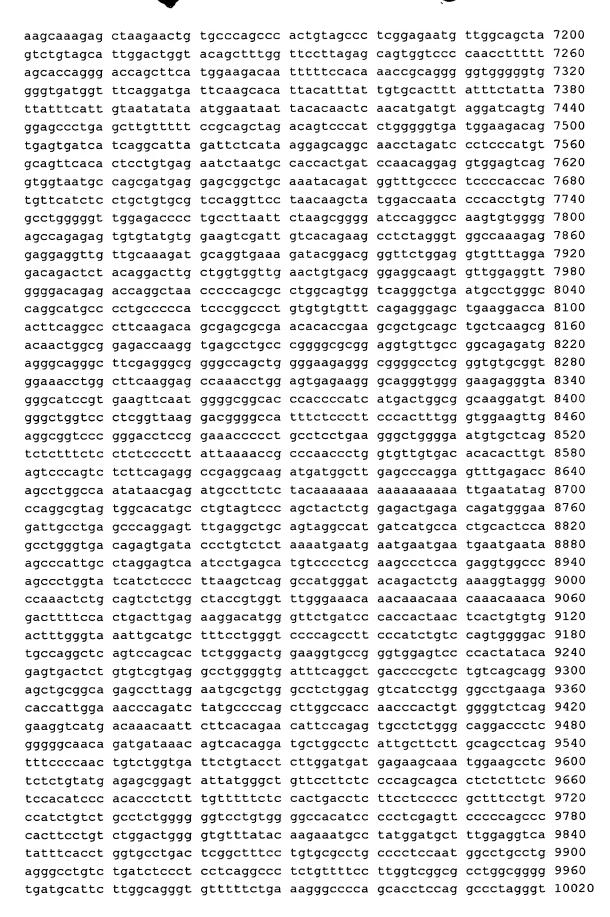
<220>
<221> modified_base
<222> (6671)..(30676)
<223> n = A or C or G or T/U
```

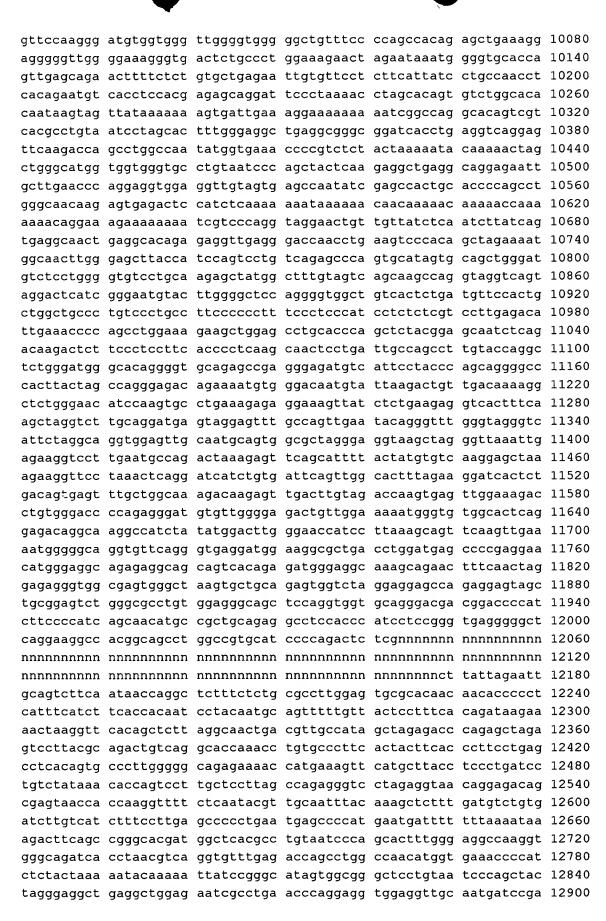
<400> 8

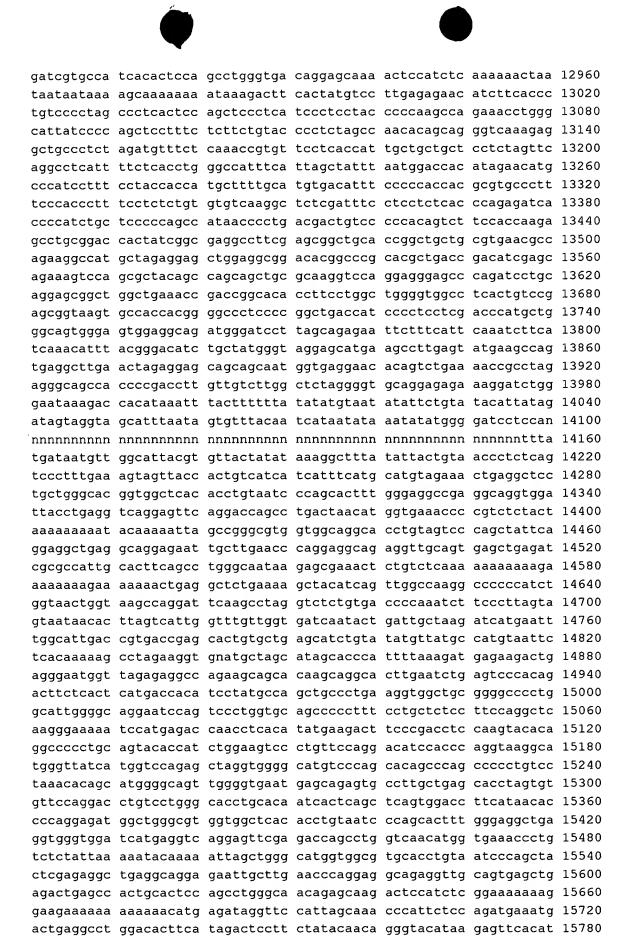
cagoogogoa cocottooto gogttaccot cottooggac agoaccocot coottotoog 60 gtagetecta eccetgeetg tgegggeete gteecegege ecageceteg gtgetgeete 120 cgacagegee gegetetete ageegeeeee etgeeeeteg ggeeeeetet etgetgeeee 180 tgggccatgg gtgcagcctc aaggacgagc tgctgtgctc catctgcctg agcatctacc 240 aggacccggt gagcctgggc tgcgagcatt acttctgccg ccgctgcatc acggagcact 300 gggtgcggca ggaggcgcag ggcgcgcgac tgccccgagt gccggcgcac gttcgccgag 360 cccgcgctgg gcccagcctc aagctggcca acatcgtgga gcgctacagc tccttcccgc 420 tggacgccat cctcaacgcg cgccgccgcg cgaccctgcc aggcgcacga caaggtcaag 480 gagcagcate aggteacegg categaegae geettegaeg agetgeaggt gegetaeeeg 600 gcctgcctgg ggaaggggg gggccgggct ggaggtgggg ccgggcgggg ggtggggtca 660 gggctggacc gcgggccagg cccagtcaga atggtcctgg ggcggggccg ccagcaaggt 720 cagggcccta tcaggagtaa cgcggggcag ggaggggcgg gcgcgcgcat ggcggggccg 780 tgggggcggg gccttgggca gtccggaccc tgagggatct gagacagacc tggagtaccg 840 gctggtccgc ggttagggag aagtcgggga tgcggatggg atggcggaaa caagtgagat 900 cagaactgga ccagatactg ggctggggca gggttgtgga cgaaccggaa tcagagttgg 960 gcaaaggcag ggccactgtc agactgaggg cgaggtcgcg aggatgggtc tgtattaaac 1020 cgggtagctg agctctggca ggctgggggt tctgtggggg cggagaccgg atcagatgtg 1080 catcaggact aagaggagta cgggggctag aatgtgctgg acaggtgagg gtgaaaccta 1140 atagagtggt ataagttagg gtgccaaagt gctgagaggg caggtttgag taccgagggt 1200 taggccaagg tgtatgaggg gttaagactg agatcaggtc cggatactct acaacaagtt 1260 tagatttaag ccagagtaga ggccaggttg agtggggcca ggacttaaag gtaaagattt 1320 ggagaataag gcccagatgt aaggtgattc aagaagggag gggctagacc tctaggagtc 1380

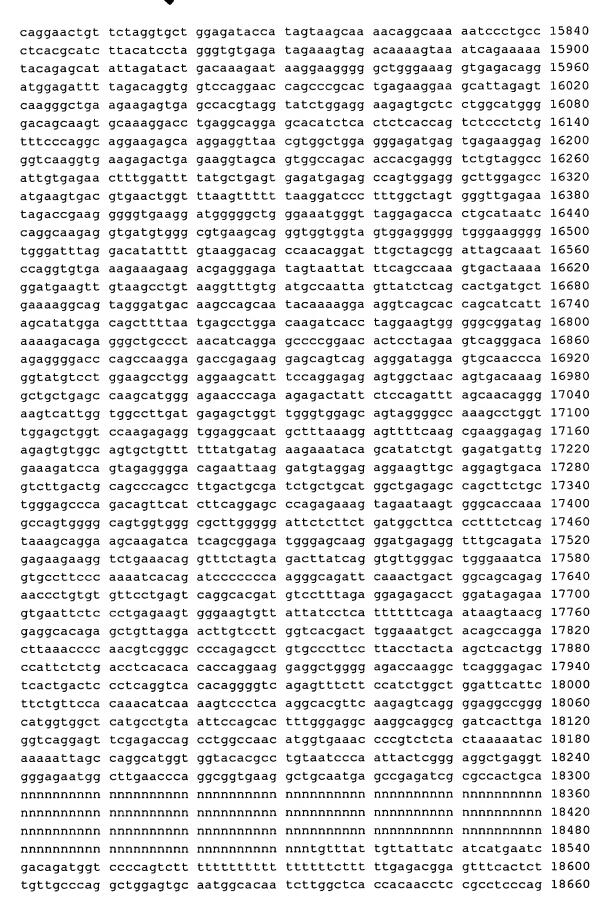






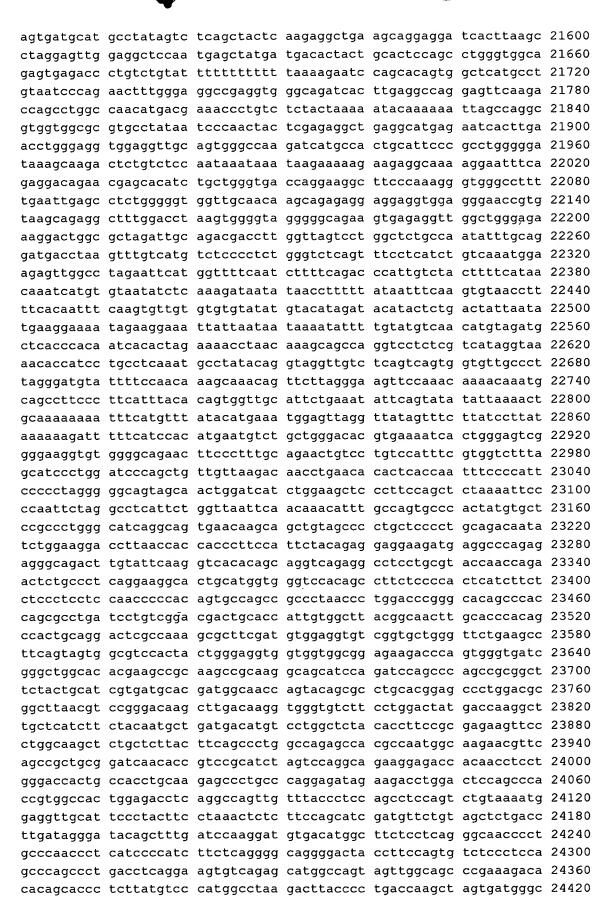








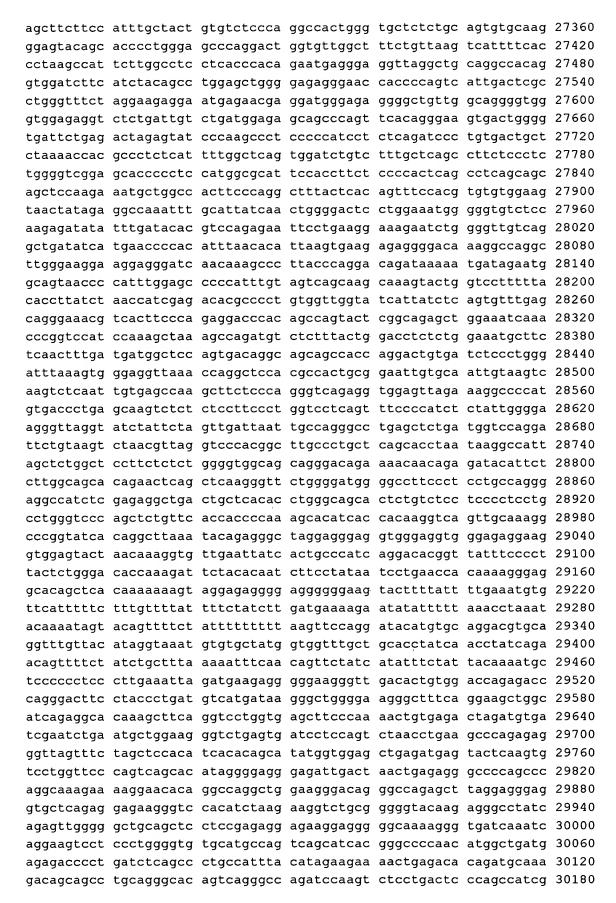
attcaagcga ttctcctgcc tcagcctccc aagtagctgg gattacaggc atgtgccacc 18720 atgcgccgct aattttttgt atttttagta gagacagggt ttctacatgt tggccaggct 18780 gatctcgaac tccggacctc aggtgatccg cctgcctcgg cctcccaaag tgctggaatt 18840 acgggcgtga gccaccaagc ccagcctccc cagtcttgct gaacaggctt tctggggcca 18900 catgctggga agagcatgat gtgaaaagac ctcagctgaa gttccaactc tgcttcctct 18960 ccaagtggca gcttgagcaa gccacttacc tcagagttgt ctccttggag cctcagtctc 19020 ctcttctgaa aaatggctag aacaatttgt gcccctgggt ctgtcgtggt gctcccatga 19080 gctagtgagt gtgagaatgt ttttgcacat gtctgccctg tacatctgag ggactgagga 19140 acctggtttt ttaaaggcct ggccagagga aaacgcttac agccagcctt tcatgttctg 19200 tcaggcctct gcatgttcga agcctctgtt cttgagaaca aagaaacaca atccactcac 19260 tgccaagcag ctgtgctggg ctgtgcccgg gagggctttc tccgctgctt gggcagaatg 19320 tgattgetea gtggtggeeg ggaaacatet eetgggaeet eeacagteea tgateettee 19380 tgaatgeett tgaeeteaag gteteagaga tgettaaatg aatggaeaae aeaeetggag 19440 accagacggg ctgcctcagt gtctggcttg tttttataaa tcttggtgtc ccgggactta 19500 gaaatgagct ctgacctgta gaatagtgag cccccaggga ctgcgcttgt tttgctgggc 19560 ctgtcacctc ctggggatga gggacagatg gaggaactga cttctcagag ggggaagggg 19620 tgttgccatg ccccttctag gtccctttct ggtctgaagg ttgttactcc tgttagccct 19680 agcctcgggg agggagcccc aggagccaag accctgtgtt aatgattcgt gcaaggcctt 19740 ggaggtggct tcagcagagg tgccacaccc tgccccagcc tcaccccttg ggtgatagaa 19800 gtctcctaag agtcaggcca cacccccgcc taagagagtg gcaggcccct gcccctaggc 19860 cggcccagtg agtggcaggc cctgtaccca tcctgtcccc tgggcttcaa gcagcacagg 19920 teegetegee agggetggea tteactgggt eaggatttee teeaatetge aggettatet 19980 ttgtctactg gtctcagacc cacggagagc ccccttgtct ccctcctagg gtgccctccc 20040 actcatcagt ggcaccacaa gtggctcaca ttgtcctaca taagctacaa gtctgaagct 20100 gagecettat acetgettga gggtateece egeceegeae eagtetttet geegtgagee 20160 teggttgetg cetgttgetg gteteaaate acceaggege ettagatate atgeetaggt 20220 teececagea etetgaaetg etgetgttea tgeetgggea etgtgeateg etettetgee 20280 cctccactgt cacacctgag tgtgatccac atcccactgt catagggtgg cccacctatg 20340 tetgattagg tteetettet caatetaget etteeceeta eeacacaete eteetaeage 20400 teceteceae teceaeetee egaeeeeaet gtgggaattg eecaeattee accaggneag 20460 gggccccctg gttctgacaa gctgcctgtg gccagtcaga ccacagggtg aaacatccag 20520 ccaccaactc agtggccgtc ctctcttggt tccccgtctt ctatgtccct ggacagagga 20580 ttgtgtttcc attgacccct ctattcacaa ggctaattac ttccatacag ccctctaagt 20640 ccaaaggaca gaaacaaaga gggtaaaatg caaaactaaa cttactcctg gcaaagatca 20700 tggaaggaac ttgatatagg tcactggtcc agtgggtata tgaacagagg cacagttcag 20760 ggactggctg tageteetg ttggggacag teeceateat tgaggeatet tatttetgea 20820 catcagtgca gccaacagag gcaactgaag tagggagaat gctccagcca agcataacca 20880 tgtccccact tcgccagtaa aggaaagagc cagagagctg gatgtccaag accccaagga 20940 acagaggcaa ttccttcttc ccacttttcc tcatctctgt cttgctgttg cctggaaatg 21000 gtcattcagg ctaaggaaag ccaatcccag tttcctcctt ctcctctggc cagttatcag 21060 ctccctcagg gagcagagag taaacagagg tcttaacaag ggttcatgaa atttttagtc 21120 agacctgcta agccggtgtg gccagcccag agccaggtga tgcagcccat gccacctgcc 21180 caacacaaac atggccagtt taatttggtg agtctttccg gaaatgtgcc acaagccagg 21240 ccctgggctg ggctctggac acacaaggga gagccccatt agacagtaca cggtccttgc 21300 cctcttggtg caaatgggga aatagggcaa aatgtgatca cagaagataa taccccacgc 21360 cagtatcagg gcacaaataa agctaaagaa tttcaggcca ggtgcagtgg ctcacaccta 21420 taatcccagc actgtgagag gctgaggcag caggatcact tgaggccagg agttcgagac 21480 cagcctggcc aacattgcga aacctcatct ctatgaaaaa tttaaaaaatt agctgcgcat 21540





catttaccct tgaccccagt ccacagtggt cacaggtagt acctggtcct agggttgcct 24480 gagagecaae eteteetgee acceecacae caagaactat atggtteeta etteteecae 24540 tgatctgctg gtcagtgatg atgctgtggc ctgtggaagg cacctggtag ttgagtccac 24600 acattatagt catgtgccac caccttcctg cccacaggcc gagggacagg gtgagggtat 24660 acccaaagct gatgcagagc ccattagcct aaaagcaact gcaggacaag cctccctgga 24720 tgatcgaggt ccccagtagc tctgaacaag agtccagcca accctcttca gccaggcctc 24780 tgtgacctgc tagggtgcag gaggcttcca gaagcagttg ttgtaattag gacccaagca 24840 ctgggagggg ctgttggctg gaccccttgt cagacttggc atctatctca gttaggatcc 24900 tgctgcagaa aacaagagcc acttgtagct ggtttaatta gacaaggatt tactacctgg 24960 cccctggtgg cttgcaaaat tgttggaaga gctggagaag cagactctgc tgaatttcca 25020 ggaactccca gcgccagatt catcatgtct gttgtgacca ggaaagctgc ccccatctgc 25080 aggaagccac tatgccagaa agctgctgac tgcagaacta ggctccctct gccacggtcc 25140 gtgccagcca atagatgtcc tgaggcctgc ccctctccca cttcactcag ttcccaaatc 25200 taaattttta caagagattc tgtttggggg aacttaagtc agatccagaa ccttggctgc 25260 aagggagtet gggaaatgte attteeetag aaggaagtta gggtgggtgg ageaageeee 25320 acctgcgttt ttctgccaca gcatccaatc gtgaagaact cgggagaggg tggagtccac 25380 atctagggtt gtcctgcccc ttggctctat ccctgcccag aggtgggaac tggaggagtg 25440 ggctgcaaga ctgagcctaa atgtctcccc ggccttgact tttctttcta gtcctggggc 25500 ctagattctg cacttggggt ctctgacaca acacaccatc ccaaagtagc cggaagagct 25560 aaacacaggg ggttcttaaa atggctgccc ccgccacccg ggcctccctt gggcaaaagg 25620 aattgtcagc cctaccccaa cccttcaact accagaatct gggccacccc agcagtattt 25680 ttatttaaaa tgttgcccat tttatgagtt atgatcaatt tgtattaaat taaagttaca 25740 gatgtcagta gccagttcca ttcattttga caaacacaca ggcccaccca gctctgtccc 25800 aggcagtgca cacacatgag catagctaat ccacaaagca gcccggctgg gtaaatggta 25860 ttatgctcat tttacagagg aggaaaattg aggttcagag agaagccaag acttacctgg 25920 ggtcccatat cccatgctgg caagtgccac accacaaacc tgtccaaaaa cttaccagcc 25980 agggaagget gtcagtettt acctggagga gaggtggtgg tagtettggg ageaggeage 26040 aggcagctca tggggcagtg gcaagagcct ggtctcggga accacacaga cctcagctca 26100 aatccagget ccatcactgt gtgactttag aaaaatgacc accetetetg ggactcagtt 26160 ttcccacatg gaagatgagg ataccaattt cacataattt attggtaagc tgtaaagtgc 26220 agtgcactta aggaggccct accctatccc cccagctgcc tcccagagtc agtgcctgga 26280 gctgtatggg tttcctgaac ctctgggctg gctctgaccc aagaagtctg tctttctcct 26340 tatgggctgt gacgggtatg gaaccaccta gaccaggacc atcctgaggt ccatcccacc 26400 tetgaetgat gaggaageat eetggetggg agttaggaca ggetetgeat gtggaeacae 26460 aggctgtgca cacttaagtg gaaaagactg tcgactaaag aagaaatatc aagcttttaa 26520 agaattaaag ttcactttac ttagaagtct tactgagtac tatagacagg cctagagccc 26580 agcagcggcc ctttagagag gttctatcag tcgggcccag gacagtattt tagcccactg 26640 cttatataca ggtggtggag gtttagtaca cgcaaaatca catcacactt gctcagaagt 26700 aacattaaag ccaccgggcg cagtggctca tgcctgtaat cccaacactt tgggaggcca 26760 aggcaggcgg atcacctgag gttgggagtt caaaaccgcc ctgaccaacg tggagaaacc 26820 ccgtctctac taaaaaatac aaaattagcc gggtgtggtg gcacatgcct gtaatcccag 26880 ctgctcggga ggctgaggca ggagaatctc ttgaacccgg gaggcggagg ttgcggtgag 26940 ctggagatcg cgccattgca ctccagcctg ggcaaagagc gaaactccgt ctcaaaaaaa 27000 aaaaaaaaa aaagaagtaa cattaaagcg gaatcatata tcaacgtttg catgtaagag 27060 tgtgtctggg ctatagatta cagaggcata atcatgaatg ccatcagaca ctatcttctg 27120 tacaggaaaa ggcaaggact aggtttattt atcttttaag gaacgtagtg actcaggcaa 27180 gagacatggg gccatgccca ctattctgtc ttgtctccaa agtatccctc cacagagccg 27240 cacatggtca cagagtcaga ggcttgtgaa attatgctgg caaacagaaa tgagggaagt 27300









gctcttttca	tgcaaacttc	agtctccctc	ttgtggattc	tggtgtctcc	tcctaccccc	30240
tgggaacctg	gagcctgagc	agaaggagaa	ggggagagag	gagggttcca	acaaccccag	30300
gcaccaggag	ctgggtgcct	tcctctgttg	tcctctccaa	ggagaagaga	gagctggcct	30360
ggacctccag	ggcagagcca	cttcatacct	gcccacacct	ggtcctcctt	tgctggcaac	30420
agagttcaga	gctagcacca	gccacagcaa	ggacaaagcc	cagcccaggc	agctgctgga	30480
gctgcaggga	gtcccaggta	agtgaaagca	ttgggactga	tggccaaggg	ggttcctgat	30540
ttcatggcac	tagagaaann	nnnnnnnn	${\tt nnnnnnnn}$	${\tt nnnnnnnn}$	${\tt nnnnnnnn}$	30600
nnnnnnnn	nnnnnnnn	nnnnnnnn	${\tt nnnnnnnn}$	${\tt nnnnnnnn}$	${\tt nnnnnnnnn}$	30660
nnnnnnnn	nnnnnn					30676

<210> 9

<211> 369

<212> DNA

<213> Human

<400> 9

gttgcccagg	ctggagtgca	gtggtgcaat	atcagttcag	tgcaacttcc	acttcccagg	60
ttcaagggat	ttttttggga	ggcttcagct	tcccaaatac	ctggaaaaca	ggcgcccgcc	120
accatgcctg	gaaagatggg	tagagatggg	gtttcaccgt	gttaaccagg	atggtgtgga	180
cctcctgacc	tcatgatctg	cctacctctg	cctcccaaag	tgttgggatt	ccaggcgtga	240
gccaccgcgc	ccagctggtt	ttattattt	tttattgttt	tatttgaata	agtattactg	300
tggcccaagt	acatccaaga	atgtaatagc	ttaatgcttt	cactactatt	gtgagtgaaa	360
acttttccc						369